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for RETAILER — WHOLESALE — MANUFACTURER

NOVEMBER 3, 1951

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The

# CHEMIST AND DRUGGIST

for RETAILER—WHOLESALE—MANUFACTURER

NOVEMBER 3, 1951

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## CONTENTS

No. 3741

A Pharmacist's Anthology ...	595	Legal Reports ...	581
Births ...	582	London Nursing Exhibition ...	576
Books, New ...	607	Manchester Prize-giving ...	576
Branch and Association Meetings ...	588	Marriages ...	582
Business Changes ...	580	Miscellaneous Inquiries ...	598
C. & D. Refresher Course ...	599	New Companies ...	580
Coming Events ...	580	News in Pictures ...	583
Deaths ...	582	Nomenclature of Narcotics—II ...	596
Editorial Articles:—		Personalities ...	581
The South-west Speaks ...	593	Print and Publicity ...	608
Preparing Clean Injections ...	593	Scottish Executive ...	579
Co-ordination in Abstracting ...	594	Shop Closing Hours in N. Ireland ...	602
Examination Results ...	582	South-western Area Conference ...	586
Executive Councils Association ...	578	Topical Reflections ...	577
Experimental Work on Vitamins ...	590	Trade Marks ...	608
France's "Assurance Sociale" ...	595	Trade Notes ...	584
Information Wanted ...	592	Trade Report ...	603

## NEWS OF THE WEEK

**Scottish Tariff Amendments.**—A list of price revisions in the Drug Tariff applicable to Scotland has been circulated by the Department of Health for Scotland.

**Laboratory Technicians' Salaries.**—The professional and Technical Council B of the Health Services Whitley Council has agreed salaries for medical laboratory technicians, ranging from £125 per annum to sixteen to £320 per annum at twenty-five years.

**Associateships in Chemistry.**—The following are among the successful candidates for the September examination for the associateship of the Royal Institute of Chemistry: Messrs. Raymond Maurice Camp, Ph.C., Harold Walter Martin, Ph.C., and David Stanley Smith, Ph.C.

**"Open Licence" Amended Lists.**—Amended lists are now available showing the goods exempt from import licensing when shipped from particular groups of countries. The lists (Notice to Importers No. 458) cover all goods on open general licence and can be had on application to the Import Licensing Branch, Romney

House, Tufton Street, London, S.W.1. An addressed envelope, suitable for a bulky foolscap document, should be enclosed.

**Ministerial Appointments.**—Among Ministerial appointments that have been announced by the Prime Minister are: *Chancellor of the Exchequer*, Mr. R. A. Butler; *Minister of Labour and National Service*, Sir Walter Monckton; *Minister of Health*, Captain H. F. Crookshank; *President of the Board of Trade*, Mr. Peter Thorneycroft.

**Royal Visitors at Exhibitions.**—A "District Nursing in London" exhibition held at the Wellcome Research Institution, London, October 23-26, was opened by Princess Marie Louise. Officers of the Wellcome Foundation, Ltd., were afterwards presented to the Princess, who also visited the Wellcome "History of Pharmacy" exhibition, accompanied by Lady Nathan of Churt and Dr. E. Ashworth Underwood (director, Wellcome Historical Medical Museum). Later the same day Princess Margaret visited both exhibitions accompanied by Dr. Underwood and the

mayor of St. Pancras. Officers of the Foundation were presented to Princess Margaret also (picture, p. 583).

**P.A.T.A. Council Election.**—For 1952 twelve seats on the Council of the Proprietary Articles Trade Association are open for election. Retiring members of the council are: Thos. Christy & Co., Ltd., Horlicks, Ltd., Lincoln & Midland Counties Drug Co., Ltd., and Macleans, Ltd., in the manufacturers' section; Ayrtton, Saunders & Co., Ltd., Thos. McMullan & Co., Ltd., Raimes, Clark & Co., Ltd., and Sangers, Ltd., in the wholesale section; and in the retail section Messrs. S. W. Hague, H. Holmes, H. G. Moss and J. F. Watts. Members of the respective sections are eligible to nominate candidates, and nominations will be received by the secretary at 43 Gordon Square, London, W.C.1, up to November 12. In the event of an election, voting papers will be issued on December 3, and will be returnable not later than December 17.

**Essential Oil Importers.**—At the annual meeting of the Essential Oil Importers' section of the London Chamber of Commerce on October 18, Mr. A. T. Wheeler was elected *Chairman* and Mr. C. F. Bush *Vice-chairman* for the ensuing year. The chairman's report mentioned a question raised at the previous annual meeting of what steps could be taken against Brazilian shippers of inferior peppermint oil. The report said that Brazil insisted on local analysis and official weights being taken as final. As the figures could not be relied on it was unwise to accept such terms in any transaction. At the close of business Mr. F. G. Pentecost, on behalf of the Section, presented Mr. Wheeler with an antique reproduction chiming clock in recognition of his services as chairman of the Essential Oils Advisory Committee and working subcommittee during war-time control.

## LOCAL NEWS

**Schoolboys Gassed.**—Six Doncaster schoolboys were sent to Doncaster Infirmary recently after inhaling chlorine in a cloakroom. The gas is believed to have been liberated from a mixture of two types of disinfectant.

**Traders Reject Chemist's Plea.**—Despite a plea by Mr. Stanley Bubb, M.P.S., the Reading chamber of commerce decided recently against recommending any dispen-

sation to chemists to sell goods not presently allowed to be sold at times when they are open after normal shopping hours to comply with National Health Service regulations.

**"New Town" Factory Estate.**—An industrial estate forming part of the new town at Harlow, Essex, was opened by Mr. G. S. Lindgren (at that time Parliamentary Secretary to the Ministry of Local Government and Planning) recently. One of the twelve factories so far occupied is that of Airmed Ltd. (medical equipment manufacturers).

**Punches and Dies at Harvest Service.**—Included in the harvest thanksgiving service at Speke parish church on October 7 were specimen finished punches for tabletting plant by Manesty Machines, Ltd., together with bars of the raw material from which the punches were made. Speke being not an industrial parish, manufacturers took the place of corn, fruit and vegetables at the service.

**Long Service Presentation.**—Mr. Wilcox (who retired from the service of Thomas Kerfoot & Co., Ltd., Bardsley Vale, Lancs, on October 26, after forty-seven years in the company's tabletting department) received a presentation at a ceremony at the factory recently from Mr. H. Kerfoot on behalf of the directors, and from Mr. H. Burlinson, Ph.C., on behalf of his fellow-employees.

**Portsmouth Theatre Party.**—Portsmouth Chemists' Association made up a party with friends and travelled by coach to London for a theatre visit on October 10. On the return journey a coach broke down and a relief coach had to be sent for. Arrangements for the visit were in the hands of Miss X. Dowling, Messrs. A. G. Bradburn, P. G. Mowes and J. C. Bloomfield (secretary).

**Visit to Brushworks.**—A party of twenty-six members of the West Hants Association of Pharmacists led by the secretary (Mr. W. H. Cloud, M.P.S.) visited the Highams Park factory of Halex, Ltd., on September 27. Their tour included the injection and compression moulding departments and the brush making and toothbrush manufacturing shops. The party were later entertained to tea in the company's canteen.

**Health Service Estimates.**—Booth Executive Council approved on October 3 its lowest estimates since the start of

the National Health Service: £211,000 or 1952-53 (£35,000 less than for 1951-52, but pharmaceutical services were £20,000 up). — Estimates for 1952-53 approved recently by the BRADFORD Executive Council at £911,950, showed a reduction of £134,950 from the 1951-52 estimates, though the figure for pharmaceutical services was £303,220 against £213,730. — DORSET Executive Council recently approved a county estimate of £864,622 for the year to March 31, 1953, a decrease of £13,459, though pharmaceutical services, at £234,060, show an increase of £36,002. — HUDDERSFIELD Executive Council approved on October 9 estimates for the year to March 31, 1953, of £433,735 (against £565,405 for 1951-52). Pharmaceutical services were estimated at £120,900 (an increase).

## SPORT

**Golf.**—EDINBURGH CHEMISTS' GOLF CLUB. At annual general meeting on October 11, the following office-bearers were elected: *Captain*, Mr. N. A. Stephen; *Vice-captain*, Mr. J. H. Scott; *Secretary*, Mr. R. F. Muir, 4 Southfield Terrace, Portobello; *Assistant Secretary*, Mr. M. Meehan; *Treasurer*, Mr. S. W. Herd.

REPRESENTATIVES of the four manufacturers of penicillin in Britain (Boots Pure Drug Company, Ltd., Glaxo Laboratories, Ltd., the Distillers Co. (Biochemicals), Ltd., and Imperial Chemical (Pharmaceuticals), Ltd.), at Beaconsfield Golf Course, recently, competed for the Titre trophy, silver rosebowl presented by Imperial Chemical (Pharmaceuticals), Ltd. The Distillers Co. were winners.

**Tennis.**—MR. R. HARRISON (a member of the committee of the Hounslow Branch of the Pharmaceutical Society), 282 Staines Road, Hounslow, retained the tennis team of the Hounslow Sports Club, recently winners in the second division, Middlesex club tennis championships.

## SCOTTISH NEWS

**Payments to Chemists.**—The Department of Health for Scotland reported recently that during the period October 1949 to December 1950, fifty-nine out of sixty-nine chemists had received overpayments. In ten cases the overpayments amounted to over £400. Despite pleas from chemist members, the Edinburgh Executive Council, at its meeting on October 25, declined to take any further part in the matter and suggested that the Pharmaceutical General Council (Scotland) should deal more effectively with complaints. A number of chemists have been overpaid during the same period.

## IRISH NEWS

**Examination Results.** — Twenty-six candidates sat for the October Assistants' examination of the Pharmaceutical Society of Ireland, when the following passed: Geoffrey Boyle, Catherine Cleary, Thomas Curneen, Miceal Dargan, Cecilia Healy, Josephine Hickey, Alice Irwin, Thomas Kehoe, Jeremiah Long, Francis McAvinchey, Patricia McNamara, Kathleen Murphy, John O'Connor, Thomas Walsh and Alice White.

**Ulster Associates' Section.**—At the October meeting of the Associates Committee of the Ulster Chemists' Association the following applications for associateship were approved:—Ph.C.: Miss A. Staunton; Assistants: Messrs. S. J. Gilmour, B. McCann, B. McMullan, J. Pender, E. Craig, and A. Gregg; Apprentices: Miss M. Friel, Messrs. J. Hamill, B. O. Lowry, A. Moore, S. Moore and D. McVeigh. A form of contract for use between employers and employees was approved. The Associates' Section has made a presentation to Miss D. King (secretary), on her marriage.

**Pharmacists at Dublin Dinner.**—Many Irish pharmacists, including Messrs. T. B. O'Sullivan, T. R. Bourke, Sylvester O'Farrell, W. R. Such and E. Massey, were among the guests when the Association of Industrial Medical Officers of Ireland were entertained to dinner by the chairman and directors of Aspro (Ireland), Ltd., at the company's Dublin headquarters on October 25. The Irish Chemists' Golf Club was represented by Messrs. J. Draffin (captain) and P. Fahey (secretary). The toast of the Association was proposed by Senator J. G. Douglas (chairman of the company). Dr. A. J. O'Sullivan, Cork (chairman, Medical Officers' Association), replied. The toast "Our Guests" was proposed by Mr. C. W. Chesson (managing director of the company). Mr. G. C. Causser (chairman, Lever Brothers (Ireland), Ltd.) replied.

## LOCAL OFFICERS

**Essex Pharmaceutical Committee.**—*Chairman*, Mr. E. E. Farrant; *Vice-chairman*, Mr. W. H. Cloud; and *Secretary*, Mr. G. F. Deeth, 12 Kimberley Road, Chingford, London, E.4.

**Southampton Pharmaceutical Committee.**—*Chairman*, Mr. J. M. Dowty; *Vice-chairman*, Mr. M. St. G. Gross; and *Secretary*, Mr. G. Duncan, 241 Portswood Road, Southampton.

## LONDON NURSING EXHIBITION

THE thirty-sixth annual London Nursing Exhibition and Professional Nurses' and Midwives' Conference was opened in London on October 15 by the lord mayor. More than fifty exhibitors took space. The displays featured mainly proprietary remedies available to the public by counter sale. Infant and invalid foods were also prominent among the exhibits. A. & R. SCOTT, LTD., Colinton, Edinburgh, displayed their Twin-pack oat and wheat baby food; and BRAND & CO., LTD., London, S.W.8, featured specially their chicken broth. KEEN, ROBINSON & CO., LTD., Norwich, showed Robsoup, dried bone and vegetable broth prepared from peas, potatoes, carrots, yeast extract, cabbage, gelatin, edible bone phosphate, salt and onions, and intended as a weaning food. COW & GATE, LTD., Guildford, Surrey, featured Cerex baby food in their display.

A new material Glassona, for making hard splint bandages, was featured by T. J. SMITH & NEPHEW, LTD., Hull. It is a plastic material composed of spun glass

and cellulose acetate and is used in conjunction with a special solvent, drying rather more slowly than plaster. The material is lighter than plaster, impervious to water and transparent to x-rays. It is applied over stockinette. Also shown on the stand were permeable film adhesives, dressings that prevent maceration of wounded tissues. MILTON ANTISEPTIC LTD., London, N.7, showed extra large agar immersion and impression cultures, illustrating the invisible infection carried on the hands, clothes, brushes, feeding utensils, napkins, hair, feeding bottles, etc.

### Medical Films

During the course of the exhibition medical films were shown by Reckitt & Colman, Ltd., Imperial Chemical Industries, Ltd., Burroughs Wellcome & Co., and T. J. Smith & Nephew, Ltd. A display of anatomical models, including a synthetic skeleton, was staged by Educational Scientific Plastics, Ltd., West Croydon, Surrey.

## MANCHESTER PRIZE GIVING

THE opening meeting of the session of the Manchester Pharmaceutical Association was held in Manchester on the occasion of the prize distribution of the University Department of Pharmacy, on October 17. Mr. G. Smith (president of the Association) in the chair.

### Students and Awards

PROFESSOR H. BRINDLE, reporting on the 1950-51 session, said that 138 full-time students attended. Of those, twenty-five were for the last Chemist and Druggist Qualifying course to be held. Forty-four attended courses for the Pharmaceutical Chemist diploma and sixty-nine for the B.Sc. (Pharmacy) degree. There were four post-graduate students for the M.Sc. and seven for the Ph.D. During the session the Ph.D. degree was awarded to Miss Winifred G. Keepe and Mr. J. K. Sen. The M.Sc. degree was awarded to Messrs. J. D. Morgan and H. B. Woodhead. Twenty-one students graduated B.Sc. (Pharmacy). The Allen & Hanburys Fellowship was awarded to Geoffrey Shaw. Prizes won during the session were distributed by Mr. G. Hinchliffe (a member of the Society's Council): Evans Medical Supplies, Ltd., prize, books to the value of £10 10s., first year pharmaceuticals, Norman J. Hirst;

J. Woolley, Sons & Co., Ltd., prize, value £3 3s., best student final year, John Thomas; Hough, Haseason & Co., Ltd., prize, value £3 3s., final year pharmaceuticals, P. M. Wanless; Heath Bros, Ltd., prize, value £3 3s., final year pharmaceutical chemistry, John Thomas; Allen & Hanburys, Ltd., prize, value £3 3s., best student first year, Kenneth W. Taylor; Thomas Kerfoot & Co., Ltd., prize, value £3 3s., first year pharmaceutical chemistry, James A. Grundy; Griffiths, Hughes, Ltd., prize, value £2 2s., first year pharmacognosy, Doreen P. Eddleston; president of the Association prize, value £2 2s., first year forensic pharmacy, Jennie M. Barlow; chairman of the Manchester Branch of the Pharmaceutical Society (Mr. H. Steinman), prize, value £2 2s., W. O'Neill; Manchester Pharmaceutical Association prize, value £2 2s., Kenneth A. Whittaker; Manchester and Salford Branch of the Pharmaceutical Society, prize, value £2 2s., intermediate course, Salford Technical College, Cambridge; Pharmaceutical Society, B.P.C. Norman A. Richardson. MR. HINCHLIFFE addressed the students on the work of the Council, its committees, and the future of pharmacy. THE PRESIDENT delivered an address on matters of pharmaceutical education.

## TOPICAL REFLECTIONS

### Thoughts from King's Lynn

Several good points have been made by chemists interviewed for you in the King's Lynn district (pp. 564-65). Two of them referred to different aspects of resale price maintenance. One speaker observed that whatever may be the future of the Proprietary Articles Trade Association's system, "own-name" products should be pushed by retailers. I agree. It has sometimes been suggested that, excellent as it is, protection of prices for proprietary articles has encouraged indolence. The other speaker thought that retailers should be allowed to get rid of redundant P.A.T.A. goods at "sale" prices. In that case, however, the permission should, I submit, be limited to non-medicinal products. This second commentator made the interesting suggestion that representation on the Council of the Pharmaceutical Society should be territorial for members engaged in retail business, but proportional for hospital and some other pharmacists. He feared that hospital pharmacists, being, he said, "the only ones with plenty of spare time," might otherwise come to dominate the Council. How this dual system of election would be arranged, and how it would work, I have no idea; but it is worth discussing. A third speaker drew attention to the inadequate profit now allowed to retailers by the Central Price Regulation Committee. As he pointed out, overhead expenses are much higher than before the recent war; in addition, owners of retail businesses "have to finance the purchase tax." It is time that this grievance was redressed. The remarks of a rural pharmacist on the unfortunate position of those who have a small volume of National Health Service dispensing merit consideration.

### Biological Standards

The announcement that the international standard preparation of androsterone is to be withdrawn, and that other international standards have been or are being established (pp. 541-42), calls attention to valuable though unspectacular work constantly in progress under the direction of a committee of the World Health Organisation. It seems strange that our Therapeutic Substances Act was so long in reaching the statute-book. In April 1920 a Departmental Committee was appointed to advise on the effective control of such therapeutic substances as could not be sufficiently tested

chemically. Among the witnesses were Mr. Edmund White and Mr. F. W. Gamble. In the second half of 1923 a Bill based on the recommendations of this committee was introduced in the House of Lords, passed through the usual stages, and was sent to the House of Commons. It failed to make much progress there, and the same fate overtook its successor in the following year. In 1925, on the third attempt, a similar if not identical Bill became an Act of Parliament. Regulations followed on May 31, 1927, just over seven years after the Departmental Committee had been appointed. Britain cannot claim priority in taking the initiative in this matter, Britain can claim, however, an honourable record of service in the all-important work of standardisation. The Department of Biological Standards at the National Institute for Medical Research, established first in Hampstead and lately removed to Mill Hill (C. & D., 1950.I.604), has the responsible duty of defining and distributing certain biological units.

### Pharmacy in Scarborough

Though we cannot live satisfactorily in the past, reminiscences like those of Mr. H. M. Hirst and two other pharmacists, summarised on p. 554, are always of interest. Those mentioned remind us, incidentally, that Scarborough is one of the places in the United Kingdom where pharmacy does not lean heavily on its sidelines. Your volume for the first half of 1921, just taken from its shelf, contains on pp. 716-20 an illustrated description of several businesses in "the Queen of Watering Places"; and recently Mr. E. M. Chapman entertained your readers with his experiences there. Mr. Hirst's description of trade with farmers and other country customers could be applied to many areas that are predominantly agricultural. The sale of petrol, paints and colours may not have fallen to the lot of every apprentice fifty years or more ago; but small wages, hair oil and wheat dressing were familiar enough. Wheat dressing was seldom, I believe, coloured with soot. It was sold in two qualities, the cheaper one consisting of equal weights of copper sulphate and ferrous sulphate. As to hair oil, the weekly rush set in some time on Saturday, the intention being to prepare users for due attendance at worship on the following day.

**Xrayser**

## EXECUTIVE COUNCILS ASSOCIATION

THE fourth annual meeting of the Executive Councils Association (England) was held at Eastbourne on October 11 and 12. The 400 representatives from 123 councils included few pharmacists, among them Messrs. W. J. Tristram (vice-president, Pharmaceutical Society), P. D. J. Spaanderman, Huthwaite, H. Jarvis Graves, Exmouth, A. C. Cannon, Truro, and G. Checkley, Eastbourne. Talks on the "Professional Side of the Work of Executive Councils" were given by Mr. G. H. Giles (Association of Optical Practitioners) and Dr. S. Wand (British Medical Association).

### Vote for Supplementary Pricing Office

A resolution from the Portsmouth Executive Council, urging pressure on the Ministry of Health to bring the pricing of prescriptions up to date, was defeated by fifteen votes. The following resolution by the Eastbourne Executive Council, moved by MR. G. CHECKLEY, Eastbourne, and seconded by MR. E. HAIGH, was carried: "That urgent representations again be made to the Ministry of Health to effect a revision of the system for pricing prescriptions, and that an experiment be made in creating a supplementary pricing bureau for Sussex in a town where clerical labour is available."

After discussing a recommendation mentioned in the report of the management committee that a nominal charge should be imposed upon patients for the supply of medicine bottles, the meeting decided to refer the paragraph back to the next annual meeting. The report showed that, during the year ended March 31, the total payment for the Pharmaceutical Services in England was £31,802 059 (including £245,459 for rota services); the total of prescriptions was estimated at 210 millions.

MR. ALLSOP (Chairman, management committee) said that pricing bureaux now were averaging four weeks' pricing in one month, but MR. CHECKLEY said that that referred to only about 40 per cent. of the prescriptions.

MR. H. C. Brown, Bournemouth, was elected *President* for the year 1952.

At a meeting held in London previously the management committee considered the following resolution submitted by the Pharmaceutical Service Committee of the Berkshire Executive Council:—

"That the Minister of Health take the necessary power to enable the Minister to deal with a wholesale druggist who has given a warranty which proves to be faulty to one of the Minister's con-

tractors, in like manner as the Minister is now able to deal with a contractor who has committed a breach of the Regulations."

The committee rejected a suggestion of the same Executive Council that in such cases the Minister should take action on behalf of the contractor against the wholesaler instead of, as at present, taking action against the contractor himself.

A letter from the Portsmouth Executive Council protested against the Minister's action in making decisions contrary to the recommendations of Executive Councils on matters that had received "serious and painstaking consideration by Councils in the light of local knowledge." After considering a memorandum advocating change of name from "Executive Councils" to "Family Health Services Council," the committee supported the principle and requested its officers to make a recommendation.

### Comments on Annual Meeting

MR. H. JARVIS GRAVES, Exeter, wrote: At all Conferences the same hardy perennial tend to appear—the delegates who tend to monopolise the "mike," the new resolutions on an old subject, and so on. At the Conference of Executive Councils at Eastbourne the pricing of prescriptions was the reappearing subject. This year, however, after streamlining all similar motions, those that remained were aimed at bringing home the magnitude of the task of pricing the arrears and re-establishing at an early date the former local autonomous pricing bureaux. Resolutions from Southampton, East Suffolk, Surrey, Lancashire, Gateshead, Portsmouth and Eastbourne all dealt with that basic idea. It is common sense that, with a set of pricers used to reading the same doctor's prescriptions, and with scripts sorted in doctor order, the work could be expedited. The Portsmouth resolution asked for adequate steps to be taken forthwith to bring the pricing of prescriptions up to date. It was voted upon and lost, and before anything else could be said we were treated to a *précis* of the Joint Pricing Committee's annual report by MR. ALLSOP (chairman of that Committee). He brought out the old arguments about the psychological effect of a year's prescriptions awaiting attention, the averaging system working out very fairly, and so on. He announced that the pricing offices were doing four weeks'

work in a month, but omitted to mention that they were only pricing about 40 per cent. of them, and using the 5s. datum line.

The Eastbourne resolution, which in effect called for an experiment in creating a supplementary pricing bureau for Sussex in a town where clerical labour is available, was put to the Conference and, against Mr. Allsop's advice, carried. Previously the Committee chairman had said it was no use passing such a resolution and he asked the Conference to "vote it down." Under some "equitable formula for wiping off arrears," the Ministry could break fairly even, but individually any pharmacist might be as much as £20 per £100 plus or minus on his account. There is going to be, it seems to me, some attempt shortly to make us take some form of block settlement for the arrears, but it will take a very clever man to devise a formula that will be fair to everybody, even to within 3 per cent. When the subject of the container allow-

ance came up, it was avidly seized upon, not in the perspective that an allowance would have to be made for non-returnable containers and that the subject was not the concern of a Conference of Executive Councils, but as a chance of saving £1 million. The imputation was that that money was being completely wasted. The July Conference of Pharmaceutical Committee representatives in London showed that contractors were prepared to go on as at present, at a financial loss rather than return to a container deposit system. I, for one, never want to go back to dispensing into any sort of container that the patient cares to bring. Under the present system payment may not be adequate in view of rising costs of manufacture, but it is worth a certain loss per script to avoid a container-money "float" and the arguments that always arise over how much has been paid on the bottle, whether it is one's own bottle, whether clean and so on.

## SCOTTISH EXECUTIVE

A MEETING of the Executive of the Scottish Department of the Pharmaceutical Society was held in Edinburgh on October 17, Mr. H. T. Thomas in the chair.

THE CHAIRMAN recorded with regret the deaths of Messrs. Alexander Murray (chairman of the Executive in 1947), Arthur Cairns (one of the Society's inspectors in Scotland) and Dr. E. G. V. Percival (a member of the Scottish Board of Examiners). It was agreed that letters of sympathy should be sent to the relatives concerned, and that an appreciation should be recorded in the minutes.

THE RESIDENT SECRETARY (Dr. D. McCall) read a letter which had been sent to the Department of Health for Scotland, intimating that the Scottish Department could be pleased to be represented on the Joint Formulary Committee and, when requested, to submit names.

It was agreed to co-opt Mr. J. C. Lamb, Inverlathgow, to the Executive, to fill a vacancy created by the death of Mr. Murray. A report from the Nomination of Examiners Committee was received, and a report on the September-October examinations in Edinburgh was submitted.

### Post-graduate Apprenticeship

A report showed that thirteen new apprentices had been registered in Scotland, making a total of approximately 160 apprentices in Scotland. The conditions under which post-graduate students under-

took their practical training were discussed, and it was unanimously agreed to forward the following resolution to London: "That conditions under which post-graduate students take their practical training should be investigated."

### Tribute to Chairman

THE CHAIRMAN reported on the British Pharmaceutical Conference at Harrogate, and he paid tribute to the work of the Local Committee. MR. MELDRUM said that Mr. Thomas's own contribution to the Conference had been an excellent one.

MR. G. M. C. STEWART (vice-chairman of the Pharmaceutical Standing Committee (Scotland)) reported on the present position concerning the National Health Service. It was reported that methylated spirit forms had been issued on September 3 to all chemists in business in Scotland. It was decided that, in future, the forms should be issued later in September.

THE RESIDENT SECRETARY reported that a letter had been received from the Lord Provost of Edinburgh, expressing his thanks to the Scottish Department for the support which they had given to the recent meeting of the British Association. It was reported that the names of Messrs. Colin Campbell, P. H. Cartwright, and J. H. Ramsay had been submitted for membership of the Standing Pharmaceutical Advisory Committee.

## NEW COMPANIES

**E. DEAN (LOFTUS), LTD. (P.C.).**—Capital £5,000. To acquire the business carried on by Ernest Dean, M.P.S., at 26 Market Place, Loftus, Yorks. The permanent directors are Ernest Dean (managing), Nora E. Dean, Walter Dean and Selina Dean.

**MAGAZINE DISPENSERS, LTD. (P.C.).**—Capital £1,000. To carry on the business of manufacturers of soap dispensers, soaps, etc. Henry W. S. Churchill, Cecil S. Schofield, Cecil S. Schofield, Joseph R. Stopford and John F. Thomasson, directors. R.O.: 18 York Buildings, Adelphi, London, W.C.2.

**CONHILL PLANT EQUIPMENT, LTD. (P.C.).**—Capital £250. To carry on the business of designers and manufacturers of plant, equipment and appliances used in the chemical and allied industries, etc. Colin A. McNair, George Withy, Renee Brown and Hilda Royle, directors. R.O.: 43 Claughton Road, Birkenhead, Ches.

**HENRY CHAPMAN & SONS, LTD. (P.C.).**—Capital £4,000. To acquire the business of chemists carried on by the executors of the late Edgar M. Chapman, M.P.S., as Henry Chapman & Sons. Edna M. Chapman (permanent), T. H. Chapman and Wilfrid B. Eccles, directors. R.O.: 76 Falsgrave Road, Scarborough.

**DEWHURST & AINSCOE, LTD. (P.C.).**—Capital £1,000. To acquire the business of chemists and opticians and retailers of medicinal wines, etc., carried on at 79 Chorley Road, Swinton, Lancs, as G. V. Tyler. John C. Dewhurst, M.P.S., Beryl Dewhurst, Fred Ainscoe, M.P.S., and Edith I. Ainscoe, directors. R.O.: 38 King Street, Manchester, 3.

## BUSINESS CHANGES

**MORNY, LTD.**, have opened an export and wholesale showroom at Morny House, 201 Regent Street, London, W.1.

**MR. L. C. F. GOULD, M.P.S.**, has removed his pharmacy from 358A King Street, London, W.16, to 409 Goldhawk Road, London, W.12.

**MR. H. G. PROCTER SMITH, M.P.S.**, has taken over the business of Grays, Chemists, 41 Duke Street, Piccadilly, London, S.W.1. He will continue to trade under the old name.

## COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than the post on Wednesday of the week of insertion.

### Sunday, November 4

**LONDON PHARMACY RAMBLERS**, Ramble to Epsom around Danbury, Ulling and Woodham Mortimer. Coach from Charing Cross (Embankment) at 9.30 a.m. Fare 6s.

### Monday, November 5

**PHARMACEUTICAL SOCIETY**, 17 Bloomsbury Square, London, W.C.1, at 7.30 p.m. Mr. H. G. Roberts (leader of Pharmaceutical Productivity Team America), on "Pharmaceutical Industry in America."

**ISLE OF THANET BRANCH, PHARMACEUTICAL SOCIETY**, White Hart Hotel, Margate, at 8 p.m. Mr. R. J. Hobbs (Glaxo Laboratories, Ltd.), on "Pharmaceutical Aspects of Newer Antibiotics."

### Tuesday, November 6

**BIRMINGHAM PHARMACEUTICAL ASSOCIATION** at BIRMINGHAM, Grand Hotel, Birmingham, at 8 p.m. Mr. P. D. J. Spaanderman (a member of the Executive, National Pharmaceutical Union), on "The Activities of the N.P.U."

**EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY**, Stratford Church Institute, 27 Roffe Road, London, E.15, at 8 p.m. Members meeting.

### Wednesday, November 7

**NORWICH BRANCH, PHARMACEUTICAL SOCIETY**, Y.M.C.A., St. Giles' Street, Norwich, at 7 p.m. Mr. W. Fairclough (superintendent, Joint Pricing Committee for England (Central)), on "The Work of the Pricing Bureau."

**SOUTH-WEST LONDON CHEMISTS' ASSOCIATION** at B.R.W., Berkeley Rooms, Putney, London, S.W.15, at 6 for 6.30 p.m. Annual dinner and dance.

### Thursday, November 8

**BRISTOL BRANCH, PHARMACEUTICAL SOCIETY**, Beaufort Room, Grand Hotel, Broad Street, Bristol, at 7.15 p.m. "Quiz" on non-pharmaceutical subjects.

**LEEDS BRANCH, PHARMACEUTICAL SOCIETY**, Metropolitan Hotel, Leeds, at 7.45 p.m. Miss A. Lothian (the Society's librarian) on "Pharmaceutical Antiquities."

**LIVERPOOL CHEMISTS' ASSOCIATION** and BRANCH, Adelphi Hotel, Liverpool, at 7.30 p.m. Dr. P. J. Gibbons on "The British Medical Association."

**LONDON PHARMACISTS' BRANCH, ASSOCIATION OF SCIENTIFIC WORKERS**, 17 Bloomsbury Square, London, W.C.1, at 7.15 p.m. Film entitled "Industrial Dermatitis."

**NOTTINGHAM BRANCH, PHARMACEUTICAL SOCIETY**, Victoria Hotel, Nottingham, at 6 p.m. Annual dinner and dance.

**SHEFFIELD BRANCH, PHARMACEUTICAL SOCIETY**, Cutlers Hall, Sheffield, at 8 p.m. Reception and dance.

### Friday, November 9

**ASSOCIATIONS OF GLASGOW AND DUNBARTONSHIRE PHARMACISTS**, Central Halls, 25 Bath Street, Glasgow, C.1, at 7.45 p.m. Demonstration by representative of Yardley & Co., Ltd.

**IRISH CHEMISTS' GOLFING SOCIETY**, Jury Hotel, Dublin, on November 14. Dinner to celebrate the silver jubilee of the society.

## PERSONALITIES

MR. M. M. PETTET, M.P.S.I., Clara, Offaly, has been elected chairman of Portlaoighise Mental Hospital Board.

MR. GEORGE T. GURR, managing director of George T. Gurr, Ltd., left by air recently for South Africa on a business visit.

MR. J. A. STEWART, B.Sc., B.L., Ph.C. (secretary, Middlesex Pharmaceutical Committee) has been appointed vice-chairman of the Edmonton Group Hospital Management Committee.

MR. G. SYKES, M.Sc., F.R.I.C. (head of the microbiology division, Boots, Ltd., Nottingham) was recently appointed secretary of the Society for Applied Bacteriology.

MR. R. GOODE, M.P.S., D.Opt., F.C.S., 246 High Street, Wealdstone, Harrow, has been re-elected president of the Institute of Optical Science. Mr. Goode is also chairman of the Harrow branch of the National Pharmaceutical Union.

MR. ERNEST B. CROFT was entertained to luncheon in London recently by the directors of S. Maw, Son & Sons, Ltd., Barnet, Herts, on the completion of fifty years' service with the company (for thirty-three years as the company's representative in the West End of London). At a ceremony during the luncheon he was presented with a cheque from the directors. Later in the day he received a cheque and an illuminated address from his colleagues on the staff.

CANDIDATES successful in the recent General Election include Sir Peter Bennett, Edgbaston (Conservative) (see *2. & D.*, October 20, p. 516); Mr. R. Fort, Clitheroe (Conservative); Sir Ian Fraser, Morecambe and Lonsdale (Conservative); Dr. Charles Hill, Luton (Liberal-Conservative); Mr. G. A. N. Hirst, Shipley (Conservative); Sir Joseph S. Holmes, Harwich (National Liberal and Conservative); Sir Austin U. M. Hudson, Lewisham North (Conservative); Mr. H. N. Linstead, Ph.C., Putney (Conservative); Brigadier A. R. W. Low, Blackpool North (Conservative); Alderman S. H. Marshall, Sutton and Cheam (Conservative); Mr. C. S. Taylor, Eastbourne (Conservative); and Sir W. W. Wakefield, M.P.S., St. Marylebone (Conservative).

CAPTAIN H. F. C. CROOKSHANK, the new Minister of Health, has represented Lincs, in Parliament, since

his first election campaign in 1924. In 1934 he was appointed Parliamentary Under-Secretary, Home Office, in 1935, Secretary of Mines, and in 1939 he was made a Privy Councillor. Captain Crookshank became Financial Secretary to the Treasury in April 1939 and held that office until 1943. From 1943 to 1945 he was Postmaster-General with Cabinet rank. Educated at Eton and Oxford, he served throughout the first world war. After the war he served for five years in the Diplomatic Service. Captain Crookshank has been appointed also Leader of the House of Commons.

## LEGAL REPORTS

**Pharmacy Act Fines.**—At Stratford, London, police court recently, G. E. Ryder, Ltd., chemists, Markhouse Road, Walthamstow, were fined 40s. on each of three charges of dispensing medicines containing poisons without a pharmacist in attendance.

**Money by False Pretences.**—When Wilfred Edward Wagstaff, 248 Ashmore Road, Paddington, London, W.9, appeared on remand at Clerkenwell magistrates court on October 25 on a charge of obtaining £2 by false pretences, with intent to defraud, from Arthur Hugh Collard, manager of the branch of Boots, Ltd., at 82 High Holborn, W.C.1, on October 15, he admitted four other similar offences. He had pleaded guilty and now admitted obtaining £5 at the High Street, Camden Town, branch of Messrs. Boots; £3 at the Porchester Road branch; £3 at the High Street, Acton, branch; and £2 10s. at the Harrow Road, Paddington, branch. A detective sergeant said that the circumstances in each case were the same. Wagstaff was employed by Messrs. Boots as an assistant maintenance surveyor until February 1951. He called at various branches, represented himself as being still employed by Messrs. Boots, and obtained sums of money which he said he required in connection with his work. A married man with four children, aged from nine to twenty, he was well educated and had a good war record. As a result of drink, however, his work deteriorated and he absented himself from work to an increasing extent, finally giving up altogether. "If you had faced up to your difficulties in the same brave way as your wife has done you would not be in this mess," said the magistrate. "For her sake, and the children's, I will not send you to prison." Wagstaff was discharged conditionally.

## BIRTH

ROCHE.—Recently, to the wife of Francis J. Roche, M.P.S.I., 63 Howth Road, Clontarf, Dublin, a son.

## MARRIAGES

CALWELL—RAMSEY. — At All Souls' Parish Church, Belfast, on October 23, David Calwell, M.P.S.N.I., Whitehead, co. Antrim, to Marguerite Peggy Ramsey, Belfast.

WELLWOOD—COLHOUN.—At St. Comgall's Parish Church, Bangor, co. Down, on October 27, Ivan Wellwood, Ph.C., Sydenham Avenue, Belfast, to Evelyn Colhoun, Bangor.

## DEATHS

BOYD.—On October 17, Mr. Henry Allan Boyd, M.P.S., Langside, Skipton Road, Colne, Lancs, aged fifty-two.

CROSSKILL.—On October 16, suddenly, Colonel Reginald Charles Osborne Crosskill, O.B.E., aged sixty-three. Colonel Crosskill was for many years a partner in C. R. Crosskill & Sons, (sanitary towel and surgical dressings manufacturers), Calvert Works, Norwich.

KNOWLES.—On October 17, Mr. William Richard Knowles, formerly of the Town Hall Pharmacy, Market Street, Earlestown, Lancs. Mr. Knowles qualified as a chemist and druggist in 1896 and passed the Pharmaceutical Chemist examination in 1897. After retiring in 1925 he lived in Delamere, Lancs.

MANSBRIDGE.—On October 18, Mr. William Alfred Mansbridge, M.P.S., 133 Downend Road, Horfield, Bristol, 7, aged seventy-five.

MILNE. — Recently, Mr. Alexander Milne, M.P.S., Homestead, Barrack Hill, Romily, Stockport, aged seventy-three.

PATTISON.—At 64 Aviemore Road, Glasgow, S.W.2, on October 24, Mrs. Mary Pattison, widow of the late Mr. William Pattison, M.P.S., Glasgow.

SINGLETON.—On October 16, Mr. John Singleton, M.P.S., 23 Aberford Road, Oulton, Leeds, aged thirty-eight.

VICKERY.—On October 16, Mr. William Robert Vickery, M.P.S., 69 High Street, Sawston, Cambs, aged seventy-eight.

WAGSTAFFE.—Recently, Mr. Norman Walker Wagstaffe, M.P.S., 21 Hesketh Drive, Southport, Lancs. Mr. Wagstaffe qualified in 1924.

## WILLS

MR. P. J. QUINN, M.P.S.I., Irish Street, Dungannon, co. Tyrone, left £14,999.

MR. H. G. SLETCHER, M.P.S., Quinto Westfield Lane, Hastings, Sussex, left £8,644 (£7,423 net).

MR. L. N. WIGG, retired pharmacist, 45 The Ridgeway, Waddon, Croydon, left £4,531 (£4,469 net).

MR. J. R. HUGALL, M.P.S., 8 Trinity Road, and 143 Northenden Road, Sale, Chcs, left £9,515 (£9,229 net).

MR. L. TODD, M.P.S., 1 Lockerbie Avenue, Anchorsholme, Blackpool, and 6 Lord Street, Blackpool, left £2,273.

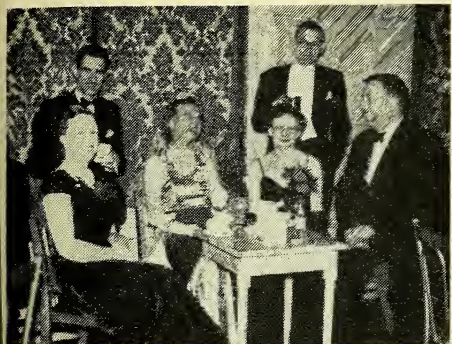
MR. H. B. ROBERTSON, M.P.S., 1 Rutland Place, 6 Seafeld Road, Broughty Ferry, Dundee, and 122 Gray Street, Broughty Ferry, left £13,106.

## EXAMINATION RESULTS

The following candidates satisfied the examiners in the Chemist and Druggist Qualifying examination of the Pharmaceutical Society of Great Britain held September:—

### SCOTLAND

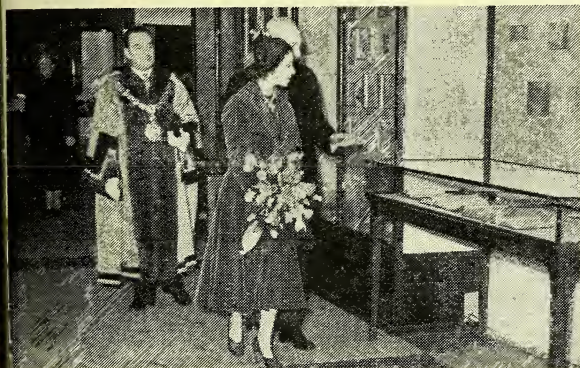
Akroyd, Christine	Measures, Bryan M.
Allerton, Margaret N.	Middleton, Sheila
Austin, Carola J.	Mitchell, John R.
Barracough, Peter D.	Morris, Gaynor E.
Bartlett, Keith N.	Morrow, Charles P.
Bligh, Michael I.	Nelson, Melvin
Blyth, Edward R.	Palmer, Ivan G.
Bone, Alexander T.	Patel, Girishchandra
Booth, Dennis	Pearson, Agnes S.
Bowen, William R.	Pepper, Sheila M.
Carlson, Freda	Platts, Denis A.
Cayley, Granville	Purves, Elma M.
Chapman, Elaine Z.	Purdie, Margaret K.
Coltart, Walter	Ralph, Jean
Cropper, Peter	Reynolds, John
Farr, Ian M.	Robertson, Elizabeth M.
Fawcett, Freda E.	Robertson, Jean I.
Fuller, Joyce A.	Robertson, Margaret
Gibson, John F.	Sharkey, Thomas A.
Gill, James S.	Shearer, Alexander C.
Gornall, Edward	Smalley, Eric
Greenwood, Hamilton	Stapleton, Norman W.
Hannah, Robert H.	Sudbury, Mary
Horsfield, Margaret	Thomas, Wallace M.
Hurrell, Doreen	Thorns, Harold S.
Irvine, James M.	Turnbull, Thomas S.
Jackson, Hilary C.	Wake, Richard
Latter, Basil	Walker, John R.
Layhe, Dorothy F.	Walmsley, Betty
Liberman, Harvey E.	Walsh, Richard J.
Lorimer, Wilma F. C.	White, Margaret P.
Lumby, Mavis	Wilson, Anne
McAinsh, James	Wilson, Isabella M.
MacDonald, George M.	Wilson, William J.
McFarlane, Hugh	Winston, Ivor J.
Marshall, John R.	Wood, Audrey M.



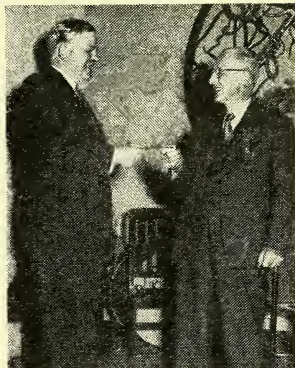
Group at Liverpool Chemists' Golfing Society's ladies evening held in Liverpool on October 17.



Professor Alexander Fleming at the works of Glaxo Laboratories, Ltd., Greenford, during a recent visit.



Royal visitor at History of Pharmacy Exhibition at the Wellcome Research Institution, London, on October 23 (see p. 573). Princess Margaret with Dr. E. Ashworth Underwood.



Mr. G. S. Woolley (chairman, James Woolley, Sons & Co., Ltd.) (left) presenting a cheque to Mr. H. Wood (former assistant cashier) in recognition of his forty-eight years' service with the company.



Members of the West Ham and Eastern District Association of Pharmacists in the works canteen of Halex, Ltd. (see p. 574). The group includes Mr. R. J. Maxey (Association president) with Mrs. and Master Maxey; Messrs O. C. Wombwell, J. Reed (vice-president); and W. H. Cloud (secretary) with Mrs. Cloud and Miss Joan Cloud (treasurer).

## TRADE NOTES

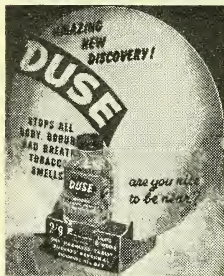
**New Plastic Container.**—On another page is illustrated a new Wind-a-Pak in plastic material for the Arvin De Luxe electric dry shaver (manufacturers: Arvin Electric, Ltd., Fernbrook Avenue, South-end-on-Sea).

**Bonus Terms.**—Burroughs Wellcome & Co., 183 Euston Road, London, N.W.1, state that since November 1 chemists have been able to take the bonus on 2 doz. Methedrine inhalers as two refills instead of one complete inhaler.

**Delays in Supply.**—Archway Laboratories, Ltd., 182 Albion Road London, N.16, announce that some delay is being experienced in the import of Pertussin preparations. Orders are being dispatched as soon as possible.

**Distribution Direct.**—C. Nestlé & Co., Ltd., Nestlecombe House, Branscombe, nr. Seaton, Devon, announce that all orders for Nestol Alura colour wave set, creme d'élite sachets, solutions, etc., should be placed direct and not through Dendron Distributors, Ltd.

**C.F. Display Material.**—The Chemists Federation, 4 Queen Square, London, W.C.1, has made available a complete set of C.F. window display material plus twelve months' service at a cost of 25s. A leaflet describing the material is available from the Federation.

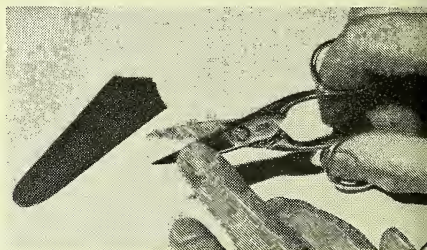


**Deodorant Tablets.**—Duse chlorophyll tablets, intended for removing from the breath the odours of tobacco, onions, etc., are marketed by Roberts Pharmaceutical Laboratories, Ltd., 128 Baker Street, London, W.1.

**Photographic Year Book.**—Johnsons of Hendon, Ltd., Hendon Way, London, N.W.4, have issued the 1952 edition of the Johnsons (formerly Johnson Wellcome) photographic year book for 1952. The contents have been revised and brought up to date, many chapters have been rewritten, and the instructions for using the now famous calculator have been simplified. It has been found necessary to increase the price to 5s. 6d. (including purchase tax).

**Veterinary Antibacterial Agents.**—Owing to the loss of a complete line of type, a recent announcement in these columns of Furacin dressing veterinary and Furacin dressing veterinary with anesthetic failed to make sense. Furacin made by Menley & James, Ltd., 123 Coldharbour Lane, London, S.E.5, should have been described as "an entirely new antibacterial agent which is effective against gram-negative as well as gram-positive organisms." The product is issued in 4-oz. jars in the two varieties already referred to. Its main indications are superficial wounds, abscesses after incision, and otitis media and externa.

**Nail Scissors for Men.**—Champion (Scissors), Ltd., Hoyle Street, Sheffield, 3,



have introduced Kumfi-Kut nail scissors for men, the feature of which is that they are made with longer finger rests.

**New Products and Packs.**—THE DISTILLERS CO. (BIOCHEMICALS), LTD., Speke, Liverpool, 19, announce that dihydrostreptomycin sulphate DC(B)L is available through the company's usual distributors in vials of 1 million units (equivalent to 1 gm. dihydrostreptomycin base).—KELDON LTD., Wadsworth Road, Perivale, have introduced a new 20-oz. bottle of Famel syrup, to replace the previous 32-oz. bottle.—SCIENTIFIC PHARMACALS, LTD., 1 Eder Street, Hampstead Road, London, N.W.1, announce that 0.5-c.c. ampoules of Suxil (dinitrile succinate) are now available from wholesalers in boxes of twelve.—SILTEN, LTD., Hatfield, Herts, have introduced a twenty-tablet pack of Leucotropin tablets. New prices are announced for the other packs.

**Window-display Prize-winners.**—Pharmacists who were successful as first prize-winners in a window display competition for Nestlé's homogenised foods organised by the Nestlé Co., Ltd., Hayes, Middle-

sex, were: G. Hamilton, M.P.S.N.I., 86 Agnes Street, Belfast; Charles Bayne, M.P.S., 88 St. Clair Street, Kirkcaldy; W. H. Harrison, M.P.S., Longford Pharmacy, Ltd., 35 Edge Lane, Stretford; D. Pearn, M.P.S., 113 Commercial Road, Macclesfield; H. Thomson, M.P.S., 134 Hawthorne Road, Erdington, Birmingham, 23; E. E. Dunkey, Ltd., Cannon Grove Pharmacy, Fetcham, Leatherhead. A full list of prize-winners and stockists who qualified for special prize are given on another page.

**Christmas Items.** — **BOURJOIS, LTD.**, Queen's Way, Croydon, Surrey, have been successful in securing distribution in time for the Christmas trade of a champagne-bucket novelty to which attention is drawn on another page of this issue. — **D. & W. GIBBS, LTD.**, 1 Watergate, London, E.C.4, have introduced for the Christmas season a new Astral bath-time pack presenting two tablets of Astral cream soap in a transparent-lidded box with four bath cubes. Distribution will be completed by mid-November. — **SAVILLE PERFUMERY, LTD.**, 12 Rickmansworth Road, Watford, Herts, have introduced a suitcase novelty bearing reproductions of travel labels, each case containing a phial each of June, Mischief and Seventh Heaven perfumes.

**New Medical Specialities.** — **SHARP & DOHME, LTD.**, Hoddesdon, Herts, are marketing a new speciality, Soluthricin, in which the antibiotic Tyrothricin is presented in a form readily soluble in water and "admirably adapted for use in prescriptions." Soluthricin is supplied as a ready-for-use solution in bottles of 240 mils containing 0.5 mgm. of Tyrothricin per mil and as a concentrated solution in 20-mill rubber-capped vials containing 25 mgm. per mil; it is exempt from purchase tax. — **A. WANDER, LTD.**, 42 Upper Grosvenor Square, London, W.1, have made available a new combination for the symptomatic management of bronchial asthma. Asmac tablets provide in one product the therapeutic means of relieving the bronchospasm and a hypnotic agent to counteract the anxiety that is often a contributory cause of asthmatic attacks. Asmac tablets are available in tube of twenty and bottles of 100, 500 and 1,000. — **IMPERIAL CHEMICAL (PHARMACEUTICALS), LTD.**, draw attention to a new formulation of Cetavlon (centrimide, B.P.): Cetavlex cream, which contains 0.5 per cent. Cetavlon in water-miscible base.

## PRICE CHANGES

I.R.P. = Inclusive Retail Price.

	Doz.	Tax	I.R.P.
<i>Dufay-Chromex, Ltd.</i> , (from October 22).			
Cameras, 12/20 ... ..	...	...	43 9
F/20 ... ..	...	...	48 9
Pop-12 unsynch. ... ..	...	...	26 2
Pop-12 synch. ... ..	...	...	32 3
Cub ... ..	...	...	73 10
<i>Allen &amp; Hanburys, Ltd.</i>			
(Apyrogen (water for injection, B.P.)) 6 x 2 c.c.	22 0	Nil	2 9
12 x 2 c.c.	40 0	Nil	5 0
100 x 2 c.c., each	23 0	Nil	34 6
6 x 5 c.c.	28 0	Nil	3 6
12 x 5 c.c.	50 0	Nil	6 3
6 x 10 c.c.	38 0	Nil	4 9
12 x 10 c.c.	70 0	Nil	8 9
Apyrogen in glass-stoppered bottles is unchanged.			
Apyrogen with chlorocresol 0.1 per cent.			
vial 25 c.c. ...	16 0	Nil	2 0
Normal saline solution for injection, B.P. 6 x 5 c.c.	28 0	Nil	3 6
12 x 5 c.c.	48 0	Nil	6 0
6 x 10 c.c.	38 0	Nil	4 9
12 x 10 c.c.	72 0	Nil	9 0
6 x 50 c.c.	132 0	Nil	16 6
6 x 100 c.c.	180 0	Nil	22 6
Normal saline with chlorocresol 0.1 per cent.			
vial 25 c.c.	16 0	Nil	2 0
Chloramphenicol B.P., capsules 0.25 gm.			
bottle of 12 ...	288 0	Nil	36 0

## PROPRIETARY ARTICLES TRADE ASSOCIATION

### Additions and Alterations to Protected List (Part 1)

	Doz.	Tax	I.R.P.
	s. d.	%	s. d.
<i>Allied Laboratories, Ltd.</i>			
Ascon suspension, 8-oz. ...	42 0	33½	5 9
Tax-free dispensing pack also available.			
<i>Arthur H. Cox &amp; Co., Ltd.</i>			
Zomex brand pile suppositories	26 0	33½	4 3
<i>E. C. DeWitt &amp; Co., Ltd.</i>			
De Witts' chest rub ... ..	12 0	33½	1 8
(introduced November 1 in Northern Ireland only)			

### Deletions from Protected List (Part 1)

*Grasshopper, Ltd.*  
Grasshopper ointment and pills  
*J. G. Ingram & Sons, Ltd.*  
Omega teat and valve  
*Monsol, Ltd.*  
Monsol preparations

### Alterations to Protected List (Part 2)

	s. d.	%	s. d.
	(Agents:)		Walter
<i>Rimmel Distributors, Ltd.</i>			
<i>Crowe, Ltd.</i>			
Jewel lipstick ...	100 6	100	21 0
Eyebrow pencil ...	13 0	100	2 9
Nail-white pencil ...	13 0	100	2 9
Two-in-one creme ...	21 6	100	4 6
Artist brush ...	18 0	33½	2 9
<i>Tokalon, Ltd.</i>			
Rouge compacts ...	8 5	100	1 8

## N.P.U. SOUTH-WESTERN AREA CONFERENCE

THE National Pharmaceutical Union held its first regional conference in Exeter on October 28, when members from an area ranging from Penzance in the west to Parkestone in the east met for an afternoon session at which Mr. P. Varley (chairman, N.P.U.) presided, and Messrs. H. Noble (secretary) and R. H. Kemp (assistant secretary) were present. In the morning members and their wives had attended a Conference service at Exeter cathedral, at which the lessons were read by Messrs. Varley and Kemp, and in the afternoon the ladies, who joined their husbands for luncheon and tea, went by coach to Hay Tor.

### Conference Sections

The conference session was sectionalised to deal with National Health Service matters, N.P.U. affairs, price maintenance, and the Chemists' Federation, with N.H.S. easily dominating the discussions. At the commencement, Mr. PETER SMITH (chairman, Exeter Branch, N.P.U.), said the event stemmed from a suggestion made by Mr. H. Holmes (Torquay area member, N.P.U. Executive). It was time chemists came from behind the dispensing screen and said what they thought—without waiting to be told what to do. Other parts of the country were watching what happened at the Conference.

MR. P. VARLEY, Blackpool (chairman, N.P.U.), said that the officers were delighted at the obvious enthusiasm of the Conference. "Your views," he said, "will provide the basis for the major policies of the Union."

In a statement on current N.H.S. matters, Mr. H. NOBLE said that the Central N.H.S. Committee certainly understood from the July Conference that it was expected to demand better remuneration for pharmacists. Not much work had yet been done, first because the time was considered too early, and secondly because the Executive was testing out methods of collecting the most effective information. A survey of overheads was in preparation, and a questionnaire was being sent out to a representative sample of chemists, and the results would be blended with those obtained from chemists nominated by Pharmaceutical Committees. On pricing, Mr. Noble said the main problem was the ten months' arrears. Something ought to be done, without detriment to contractors in-

terests, otherwise the pricing offices would always be "arriving nowhere." In consultation with the Ministry the Committee had examined ways of wiping out the arrears, but all methods so far suggested had had to be discarded as impracticable. Meanwhile there was a continued rise in overall average cost. Members would expect him, went on Mr. Noble, to make some reference to the change of Government. In his view the new Government was unlikely to commit such arbitrary acts as reducing oncost in defiance of the negotiating machinery. On the other hand it was possible that the Minister would enforce a saving on containers. It was also a Conservative policy to enable members of the public to receive their medicine on EC10 forms irrespective of whether they were N.H.S. or private patients of the doctor. It looked as if the Contractors' Committee would have a stiff fight to secure better remuneration.

MR. J. C. JESSOP, Torquay, said that two factors were involved in remuneration: oncost, and dispensing fees. Doctors were being pressed to economise. That would mean a falling drug bill. For chemists, the need was a rise in dispensing fees. Threepence profit on goods, he pointed out, cost the Government 1s. 3d. as oncost, but an increase of threepence in dispensing fees would cost the Government only threepence.

### Overheads Allocation Recommended

MR. J. W. SILL, Beaminster, suggested that there should be a special allocation for overheads, irrespective of the number of prescriptions dispensed nationally. Factors to take into account were dispensing space; storage space; time taken in receiving prescriptions and handing out medicines, in stamping, sorting and endorsing prescriptions. Those were in the nature of fixed costs and a claim based on them would have a better chance of success.

MR. H. JARVIS GRAVES, Exeter, contended that the "county" areas should have a different rate of N.H.S. remuneration from industrial and city areas. There should be in fact a "two-tier" system. Basic overheads were the same in all areas but where the volume of sales was large a smaller profit rate could be admitted. He contrasted typical payments received by chemists in Cornwall, Dorset, Somerset

and Devon, with amounts received by contractors in industrial areas.

MR. H. S. ESTLICK, St. Dennis, thought that a differential system would work provided there were no sharp dividing line.

MR. NOBLE hoped the Conference would not adopt the suggestion which, he said, would embarrass the Central N.H.S. Committee. Till now all remuneration had been national and the South-west, he said, had better oncost and average prescription figures than were general in industrial areas. MR. A. E. MILES, Dawlish, claimed that South-western chemists were compelled to lay out more money for less return, and MR. G. MARCH, Burnham-on-Sea, considered that conditions in the South-west were comparable to those in Scotland.

### Decentralised Pricing Claimed

MR. T. D. EVANS, Torquay, thought that the solution to the question of arrears of payment would prove to be decentralisation of the pricing offices. Bristol dealt with an area stretching from Cornwall to Hampshire—"a considerable slice of territory." Splitting it up would permit prescriptions to be more adequately dealt with, and in places like Exeter costs of administration and staffing would be lower and recruitment easier than in larger centres.

MR. NOBLE revealed that the Joint Pricing Committee put its faith in centralisation, and considered that that policy could soonest be brought to work well. The advantage of pricers' knowing local doctors' handwriting was unquestionable, and would no doubt provide the ultimate solution, but in the meantime the opening of a new pricing office involved, as Newcastle had shown, a loss of output for some period.

MR. F. H. BATE, Teignmouth, understood that the immediate aim was to overcome back pricing. As it had been announced that four weeks' pricing was now being completed in four weeks he did not consider the expense of establishing small pricing offices would be warranted. Averaging out the arrears and paying a lump sum to chemists would, he thought, leave them considerably better off than they were at present.

Several speakers raised the question of payment for containers. MR. A. C. CANON, Truro, pointed out that the present allowance did not cover their cost to chemists and put forward a resolution

"That no one be allowed to have his name entered on the Pharmaceutical List unless he is equipped to give adequate service"—a resolution that was carried. MR. ESTLICK urged that the notices directing patients to return bottles to the chemist should be placed prominently on the front of prescription forms and not—as at present—on the back.

The Conference carried the four following resolutions:—

That notwithstanding the necessity for an adequate oncost, increased dispensing fees for professional services are a priority.

That payment of N.H.S. scripts on a national basis is not fair or adequate for a scattered area like the South-west of England.

That decentralisation of large Pricing Bureaux with the establishment of a larger number of smaller Bureaux specialising in the pricing of prescriptions from a group of Executive Councils in the same geographical area is desirable (e.g., a smaller Bureau at Exeter to price prescriptions from Devon and Cornwall).

That the Central N.H.S. (Chemist Contractors) Committee be urged to secure as from April, 1952, a satisfactory increase in container allowance payments for N.H.S. dispensing.

### N.P.U. Matters

A resolution was before the meeting "That definite action be taken by the N.P.U. Executive Committee, and by branches of the N.P.U., to counteract the apparent apathy of members in regard to N.P.U. meetings and business." MR. R. H. KEMP (N.P.U. organisations officer), admitted that the enthusiasm apparent that day was not always seen in all areas. The Executive, however, was doing its utmost to awaken interest. Branches were being redrafted and re-formed and a representative was travelling about the country to stimulate branch activity.

### Resale Price Maintenance

A statement on the impending threat to price maintenance was made by MR. HUGH HOLMES, Torquay (a member of the Proprietary Articles Trade Association council). Mr. Holmes said they must face the facts that any Government nowadays interfered with trade, and that many manufacturers thought differently from retailers on price maintenance. Retailers must back up the Association or many of its essentials would be attacked.

The meeting endorsed a resolution that this Conference "viewed with alarm" the late Government's policy on resale price maintenance, and MR. VARLEY from the chair put forward three new resolutions,

all of which were carried. They were:—

It is the view of this Conference that the P.A.T.A. must seek to maintain its enforcement policy until alternative safeguards introduced by legislation or negotiation have been developed.

It is the view of this Conference that the introduction of any scheme to allow deferred discounts on protected price proprietaries would eventually destroy this laboriously built Association [i.e., the P.A.T.A.].

It is the view of this Conference that the existing standard of profits on proprietary articles cannot be one-sidedly lowered without damage to the structure of fair trade in the Drug Trade.

### C.F. Matters

MR. R. H. KEMP (secretary, Chemists Federation), reporting on current C.F. matters, supported Mr. Holmes's contention that the threat to resale price main-

tenance had not passed. The new Government's policy was not known, but chemists should be prepared to meet conditions that might arise. During 1952 the Chemists Federation was putting forward its greatest propaganda effort in a national C.F. fortnight to take place in the early autumn. Every chemist was being asked to dress his windows with C.F. goods, and there would be free display material.

The meeting passed unanimously the following resolutions:—

That a 100 per cent. support for P.A.T.A. and Fair Trading and the C.F. Movement be given by chemists in the South-west of England.

That with the impending threat to Resale Price Maintenance, it is the view of this Conference that every Branch of the N.P.U. should give special consideration, during the present session, to the importance of all members giving 100 per cent. support to the C.F. Movement.

## BRANCH AND ASSOCIATION MEETINGS

**Talk on Foot Care.**—Members of the West Middlesex Chemists' Association and Branch of the Pharmaceutical Society heard Dr. Doris Craigmile (Ealing public health department) discuss "The Foot Problem" at a meeting held in Ealing on October 16. Guests included members of the Joint Council of Chiropractists.

**Sunderland.**—At the first meeting of the session of the Sunderland Branch and South Shields Pharmacists' Association, held in South Shields, on October 8, Mr. Turner Bell in the chair, Mr. A. L. Bacharach, M.A., F.R.I.C. (Glaxo Laboratories, Ltd.), gave an address, illustrated by lantern slides, on "How Laboratories Use Animals." More than seventy pharmacists, assistants and students attended.

**Harrogate Lecture and Film.**—A meeting of the Harrogate Branch of the Pharmaceutical Society was held on October 18 when Dr. E. W. Tapley gave an address on "Muscle Relaxants." He said that muscle relaxation was one of the main requirements of anaesthesia. Nitrous oxide and thiopentone sodium were inadequate in that respect. In 1942 *d*-tubocurarine and Flaxedil were found to be effective as muscle relaxants, but they required special precautions. Work was in progress on soluble barbiturates which he described as "ultra short-acting anaesthetics." The address was illustrated by a colour film.

**Leeds Social Evening.**—The Leeds Branch of the Pharmaceutical Society held a social evening on October 11, Mr. L. W.

Ryecroft, M.P.S., presiding. The chief guests were Mr. H. Steinman (a member of the Society's Council) and Mrs. Steinman. Mrs. Steinman addressed the meeting on her impressions of the British Pharmaceutical Conference, and Mr. Steinman on the change and development of pharmacy, stressing the need for maintaining the highest possible standard in the Health Service so that the public and the Government could not justify changes in the Service. The evening closed with an entertainment. £6 was raised in aid of the Society's Benevolent Fund.

**West Kent Branch.**—The opening meeting of the session of the West Kent Branch of the Pharmaceutical Society, was held in Beckenham on October 8, when the new chairman (Mr. S. M. Lennox) was installed by Mr. L. S. Short (outgoing chairman). A "Members' Symposium" followed in which the following papers were presented: "The Objects and Achievements of the British Pharmaceutical Conference," by Mr. H. G. Rolfe, B.Sc., Ph.C., F.R.I.C.; "The Life of the Present-day Pharmaceutical Student," by Mr. L. K. Sharp, Ph.D., Ph.C., F.R.I.C.; "Beckenham," by Mr. P. A. Hann, M.P.S.; "The Pharmacist as Medical Representative," by Mr. P. A. Hann, M.P.S.; "West Wickham," and "The Pharmacist as Pathologist," by Mr. J. H. H. Keal, M.D., B.Pharm., Ph.C.

**Portsmouth Branches Meet.**—At joint meeting of the Portsmouth Branches of the Pharmaceutical Society and National

Pharmaceutical Union, held in Southsea on October 9, Mr. J. Elder (chairman of the Society's Branch) presiding, an address on "Retail Pharmacy and the National Health Service" was given by Mr. W. E. Stokes. The speaker advocated better planning in layout of dispensing departments and the keeping of stock-books to facilitate stock-keeping. Mr. A. V. L. Dowdeswell proposed that a letter of appreciation should be sent to the Portsmouth Executive Council for their action in forwarding to a conference of Executive Councils a resolution concerning the delays in pricing N.H.S. prescriptions. The motion was seconded and carried unanimously.

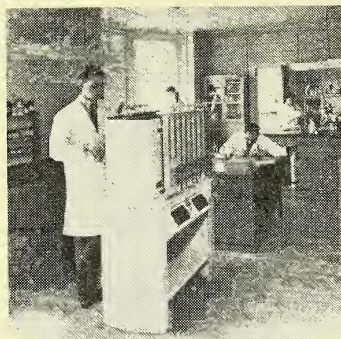
**Discussion on Tuberculosis.** — Dr. S. Thompson (chest physician of the Romford Chest Clinic) was introduced by the chairman, Mr. L. Parkinson, when he gave a talk on "Tuberculosis, Past, Present and Future," to the Romford Branch of the Pharmaceutical Society on October 8. Dr. Thompson mentioned the improvement in diagnosis due to improved x-ray examination, lung collapse, the thoracoscope, and the use of gold sodium thiosulphate as measures which had tended to reduce the death rate by half over a period of years. He referred to thoracic surgery, particularly lobectomy and pneumonectomy, and to the recent advances in therapeutic principles against the disease, particularly the antibiotics, para aminosalicylic acid, and the thio-semicarbazones. The lecturer showed a film of the Papworth settlement.

**Wolverhampton Annual Dinner.**—The annual dinner and dance of the Wolverhampton Branch of the Pharmaceutical Society was held in Wolverhampton on October 18. The chief guests were the president of the Society (Mr. F. C. Wilson) and Mrs. Wilson. Other guests included Mr. H. Campbell Orr (chairman of the South Staffs branch, British Medical Association) and representatives of wholesale and manufacturing houses. From the Walsall Branch of the Society came Messrs. K. V. Hartshorne and H. Shelley. After the loyal toast, proposed by Mr. J. Foster Taylor (chairman), the toast of the Pharmaceutical Society was proposed by Mrs. Thornton, deputising for her husband (clerk to Wolverhampton Executive Council) who was unable to be present. Mr. Wilson replied. "The Guests" was proposed by Mr. D. R. Walton, Mr. S. W. Simmons replying. Mrs. Wilson presented

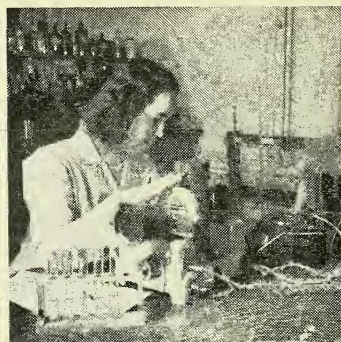
prizes to the winners of a table draw. Dancing followed.

**Glasgow Support for Price Maintenance.**—A joint meeting of the Glasgow and South-western Scottish Branch of the Pharmaceutical Society, the Scottish Pharmaceutical Federation and the Association of Glasgow Pharmacists was held in Glasgow on October 17, Mr. G. R. Milne (chairman of the Branch) presiding. Mr. R. H. Kemp (secretary, Chemists' Federation and assistant secretary, National Pharmaceutical Union) gave an address on "The Threat to Retail Price Maintenance and its Effect on Retail Pharmacy." He outlined the history of price-cutting and price maintenance, stressed the dangers of making the price maintenance system illegal, and called for support for the Proprietary Articles Trade Association and the Fair Prices Defence Committee. If resale price maintenance were abolished, he said, the only answer would be the Chemists Federation, as articles on the C.F. list could not be sold by non-chemists. Pharmacists should recommend C.F. lines to their customers in preference to other lines. Resolutions in favour of price maintenance were carried unanimously.

**Talk on Anti-thyroid Drugs.** — Dr. D. Adamson gave a talk in Dundee on September 20 on "Anti-thyroid Drugs." Recent observation, he said, had shown that naturally occurring goitrogens existed. The antithyroid substances which they contained produced a simple goitre. They had been found in vegetables of the brassica family. Prior to the use of antithyroid drugs, hyperthyroidism was usually treated either by surgical removal of part of the thyroid gland or by administration of iodine. In most patients the effect of iodine was only temporary. Thiocyanate acted by preventing the thyroid gland from concentrating iodine. Members of the most active group of antithyroid compounds all possessed a thiocarbonamide formation, typified by thiourea and related compounds. Another category — the best known of which were the sulphonamides—contained an aminobenzene grouping. The second group was not generally used for treatment of hyperthyroidism. There remained a controversy about the place of thiouracil and its derivatives in the treatment of hyperthyroidism. A new drug not related to thiouracil was 1-methyl 1-2 mercaptoimidazole. It was supposed to have low toxicity.



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Dosage of rat by Vernier syringe



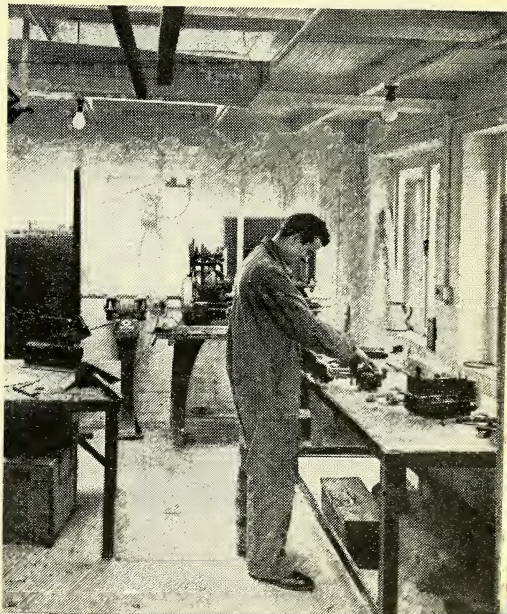
Statistical analysis

## EXPERIMENTAL WORK ON VITAMINS

**R**ESearch work in commercial laboratories has played its part in vitamin development, and the new laboratories of Vitamins, Ltd., are at once a recognition of the present importance of research and an opportunity for expanding its scale and accelerating its pace. The laboratories of the company have grown up as an integral part of the company's activities since its formation twenty-eight years ago. An increase in laboratory space secured in 1932 was inadequate five years later, yet expansion was difficult in London.

The new laboratories are attractively situated at Walton Heath, Surrey, adjoining the famous golf course and not far from Box Hill. The greater part of the house was built a few years before the 1939-45 war, and it needed relatively little conversion to accommodate the various sections—chemical, biological, microbiological, and veterinary—of the laboratories. The spacious and airy premises look out upon formal gardens full of colour throughout the spring and summer. They contain the most modern equipment, and their design and layout were planned to suit the special requirements of the company's research officers. New accommodation for an animal unit is under construction in the grounds, and the estate farm of about 300 acres, with its herds of cattle and pigs, provides facilities for field work in animal nutrition. Poultry nutrition is also provided for. Close and frequent con-

tact of the research staff with the London headquarters eighteen miles away was taken into account in the planning, and in the year since the premises were occupied surprisingly few difficulties have arisen from the separation. Parties of visitors from groups such as medical officers of health, pharmacists, dietitians and others, including overseas agents and representatives, visit the station from time to time.



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VOL. CLVI NOVEMBER 3, 1951 No. 3741

## The South-west Speaks

THE experiment of the National Pharmaceutical Union in staging at Exeter on October 28 (see p. 586) a first area conference must be accounted a pronounced success, and worthy of being followed up by similar rallies in other localities.

For many reasons the time and locale were opportune. The change of Government—though no doubt the Conference was planned before it was even known that there would be a General Election—throws once more into the melting pot ideas, outlooks and personalities on which the N.P.U. has had to base its approaches and policies since the National Health Service came into the picture. The first steps are being taken now in preparing the case on which the Contractors' Committee, acting on the instructions of the July conference, is to claim next April a better settlement for contractors. And by coincidence or from natural causes the South-west area has recently taken its turn as the source or the time being of the most fruitful ideas on pharmaceutical politics.

Possibly the South-west's most pregnant contribution to the debate at the moment is the notion of the two-tier system of remuneration for chemist-contractors. The scheme springs from the conditions that have come about since July 1948 in areas with relatively sparse populations, specially those in which the volume of private dispensing was previously considerable. One of them, Scotland, has had its settlement revised, no doubt in circumstances that might not be reproducible

south of the border. Many Cornwall and Devon pharmacists claim that their position closely parallels that of their Scottish colleagues—a claim echoed, no doubt, in East Anglia and other non-industrial areas. Briefly the contention is that while overheads are much the same whether the pharmacy is at Bodmin or Birmingham, the Birmingham pharmacy may reach five figures in dispensing a month's EC 10's though Bodmin must fall far short of such figures even during an epidemic. At the end of the month the South western pharmacist's cheque is much below that of his opposite number in the industrial urban area. The "county" chemist argues that that is not fair. With the heavier turnover could go without unfairness, he thinks, a lower oncost rate.

Nothing is inherently impossible in such a plan. Admittedly payment has hitherto been, as Mr. Noble pointed out, on a national basis. But in the medical sphere provision is already made for attracting practitioners to under-doctored areas, and that is a form of differential remuneration.

We are not necessarily arguing in favour of two-tier payments. Their acceptance or rejection must rest on an impartial assessment of the equities and facts of the situation, which may reveal that South-western chemists are under no hardship, absolute or comparative.

We only say that, like the other ideas from Exeter—the decentralised pricing office; the allocation for overheads distinct from the oncost on drugs; the transference from the back to the front of the EC 10 form of the return-of-bottle notice to patients—the notion must not be dismissed or shelved. It deserves and demands to be fully examined and explored, and either adopted as national policy or scotched as regional self-interest.

## Preparing Clean Injections

A RECENTLY published finding by physicists of the Medical Research Council's radiobiological research unit at Harwell, Berks ("British Medical Journal," 1951.2. 1930-32), that ordinary chemical methods of cleaning ampoules are "quite ineffective" in removing dust and siliceous material, may cause no surprise to those who,

on the conventional pharmaceutical plane, have been grappling with the problem of particle-free solutions. The unusually high degree of cleanliness from particles which was sought at Harwell, and the way of obtaining it, however, make their report important to workers in other fields than their own. Their work was prompted by problems which arose in the dispensing of radioactive phosphate solutions. Specimens of those solutions (which contain radioactive phosphate in a buffered vehicle of isotonic saline), as prepared by the methods in use to the end of 1950, were "faintly hazy," and centrifuging could remove up to 50 per cent. of their activity. In a subsequent overhaul of the dispensing procedure, particular care was taken to minimise contamination with bacteria, organic particulate matter, and organic substances which they thought could cause the unwanted effect. The apparatus used for testing the solution in ampoules was an adaptation of that frequently used in the "sterile units" of pharmaceutical manufacturers, and provided a narrow beam of light which was made to fall across the solution. The solution was examined with a lens or low-power microscope, the net effect proving a "somewhat severe test."

The method finally adopted for cleaning was to insert into the resistance-glass ampoule a few gm. of powdered glass on top of which was poured concentrated nitric acid. The interior was thoroughly washed with the mixture, using a rapid rotary motion, the mixture being then warmed to about 50°C and poured off. After being washed with tap water fed into it by a narrow glass tube for three to four minutes, and then four times with a jet of distilled water fresh from the still, the ampoule was partly filled with the fresh distilled water, and closed with a rubber cap. It was examined by transverse light and, if regarded as clean, emptied and sealed with a rubber cap prior to immediate use.

For preparing inactive phosphate buffer and saline solutions, the methods used included refluxing the solutions for thirty minutes to facilitate coagulation of insoluble material. The solutions were then

cooled and poured into clean centrifug tubes, which were closed with a rubber cap and spun on a large centrifuge for fifteen minutes. The upper half of the liquid was then carefully syphoned off through a narrow-bore tube into a clean flask. The process gave noticeably cleaner solutions on testing with the transverse light than solutions prepared by dissolving the salts directly. The operations were carried out in an atmosphere as dust-free as possible. Whether the method has the advantages, as the authors claim, of reducing the risk of bacterial infection while avoiding the "rather serious complication of total aseptic conditions," may be debatable, but at least the risk is reduced.

### Co-ordination in Abstracting

Two of the latest United Nations publications (their publication date almost coincided with United Nations day, October 25) deal with the international co-ordination of science abstracting and indexing. While in the realm of medical and allied sciences much remains to be done, those sciences seem to lead the field in the matter of co-ordinated abstracting following the work of conferences in 1947, 1948 and 1949. The Co-ordinating Committee on the Abstracting and Indexing of Medical and Biological Sciences of the United Nations Educational Scientific and Cultural Organisation has, for example, been made permanent, and based on their experience a number of guides are being suggested to other workers. It is wisely recommended for example, that Unesco should be clearing house for establishing coordination machinery. A particular plea made by the author of a paper on the use of symbols and abbreviations in medical science for "keeping within bounds" is a tendency to use abbreviations such as A.P.T.; P.T.A.P.; P.A.B.; and DNase, for respectively, alum precipitated toxoid, purified toxoid alum precipitated; para amino benzoic acid and deoxyribonuclease must meet with general support. To add to the confusion from the use of abbreviations, contractions of Anglo-Saxon origin are incorporated into other languages where they become meaningless, the author adds, to most readers.

## FRANCE'S "ASSURANCE SOCIALE"

THE *Assurance Sociale* of France as a form of health service has been introduced in its present form quite recently. It may be regarded as being, in scope, halfway between the former British National Health Insurance and the National Health Service currently in operation.

By law, all employed persons must be subscribers, and the weekly payment is met partly by the employee and partly by the employer. There are facilities for hospital treatment, operations, surgical aids, etc., but nothing quite like the British supplementary ophthalmic service or the facilities for dental treatment. The backbone of the service is treatment by the general practitioner and the supply of medicines through the pharmacist. There is no "panel." A subscriber may call in any practitioner he wishes, whether an expensive consultant or a small country general practitioner. The account is paid by the subscriber to the doctor in the ordinary way, and the doctor then signs a special *Assurance Sociale* form which the subscriber presents to the requisite bureau in order to obtain a cash rebate. The French assert that this arrangement preserves the traditional family doctor relationship far better than the English system.

If the doctor decides to prescribe medicine of any kind he issues a prescription, usually on a special form, and the prescription is taken to any pharmacist legally keeping open shop (*officine*) where it is dispensed and paid for in the ordinary way. The pharmacist signs or stamps a form that sets out the price charged, and that is either taken or sent to the nearest *Assurance* office for reimbursement. Not the whole amount, but usually something of the order of 80 per cent. or 85 per cent. is repaid. Here again the French claim that their system is superior, as the fact that the subscriber pays something prevents waste.

Doctors have not the freedom to order anything they please under the *Assurance*; there are (a) a formulary much like the N.F., and (b) an accepted list of drugs. If anything is ordered outside the list, the *Assurance* bureau will not accept the prescription for repayment. By that means the authorities now strictly control the prescribing of proprietary medicines, and it must be understood that the control is additional to the control on sale exercised by the "visa" system. Any manufacturer

who wants his speciality put on the *Assurance* approved list of drugs and preparations must submit it to the authorities, who will judge on its worth and accept or reject it. If it is accepted, the price is fixed and the manufacturer and pharmacist must keep to that price. To do so is not an undue hardship, since all dispensing prices in France, whether for galenicals or specialities, are controlled by law. It is safe to say that any genuine "ethical" speciality would be accepted, but the type of product frowned upon by the Cohen committee in this country would not. The authorities reject any cosmetic or food, or anything that might come within their definition of *produit d'hygiène*, and even cotton wool is suspect, as it might be used for non-medical purposes. It should be pointed out that the regulations controlling proprietaries go further than the ordinary doctor-pharmacist relationship. Public hospitals, which comprise 80 per cent. of all hospitals in France, are allowed to use only those drugs and products that feature on the official list of the *Assurance Sociale*.

## A PHARMACIST'S ANTHOLOGY

By March (1658) an operation [for stone in the bladder] could no longer be averted. To ease his [Pepys'] suffering Hollier called into consultation his old master, Dr. James Moleyns of St. Bartholomews\* who prescribed a soothing draught of liquorice, marsh mallow, cinnamon milk, rose water, and white of eggs. March 26 dawned; then in the presence of his nearest relations . . . Samuel made himself ready for the knife and swift, burning pains. The operation was a complete success. Hollier was a master of his craft. In that year he cut thirty for the stone and all lived, though sometime after four others whom he also operated on perished: such seemed a miracle in those days; we can now guess that his instruments had become septic and that had Pepy's turn come a little later we should have had no diary. From the patient there was taken a stone (size of a tennis ball)—in technical language about two ounces of uric acid of renal origin. Then a soothing and stimulant drink was prescribed of lemon juice and the syrup of radishes.—From "*Samuel Pepys, The Man in the Making*," by Arthur Bryant.

# NOMENCLATURE, NATURE AND CHEMICAL STRUCTURE OF NARCOTICS

## 2.—Morphine Derivatives

**T**HE Expert Committee on Drugs Liable to Produce Addiction has defined an addiction-producing drug as one which:

- (1) produces an overpowering desire to take the drug and obtain it by any means;
- (2) tends to require an increasing dosage; and
- (3) produces a psychological (and sometimes a physical) dependence upon the drug.

Morphine possesses an analgesic action that is almost universal against pain. It also acts as a hypnotic if the dose is large enough. The euphoric effect of the drug (*i.e.*, relief from pain or emotional discomfort) diminishes with increase in tolerance to repeated dosage. Abrupt withdrawal of the drug (from an addict) results in severe muscular cramps and uncontrollable twitchings. Insomnia and loss of appetite supervene. Vomiting and diarrhoea often follow with resultant loss of several pounds in weight during the second or third days of abstinence.

The endeavour to separate the analgesic activity of narcotics from their addiction tendencies has met with little success. Methorphan is stated by the Expert Committee to have an addiction liability approximately equal to that of morphine. This would seem to confirm that the connection between analgesia and addiction is a matter of chemical configuration.

In medicinal use, morphine depresses the respiratory centre, a fact that limits its use in obstetrics. It lowers the tonus of the small intestine and thus tends to cause constipation. In some cases it has an emetic action resembling in minor degree that of apomorphine.

The activity and intensity of effects of derivatives of morphine vary considerably. Ethers of morphine are free from the more undesirable properties of the alkaloid and serve as cough sedatives in the absence of depressive action. The esters exhibit quicker and stronger analgesic properties accompanied by intensification of euphoria and liability to addiction.

### Methylmorphine and other Ethers

Codeine is methylmorphine, the simplest ether of morphine. It is formed by replacing the hydrogen of the phenolic hydroxyl (as at 3 in figure 4) by a  $\text{CH}_3$

group. Codeine is largely used to abate the common cold and relieve coughs. In all descriptions, absence of depressant action on the respiratory centre making it suitable for that purpose. The drug acts as an analgesic if pain is not severe, but is decidedly inferior to morphine in this respect.

Ethylmorphine or Dionin is more toxic than codeine, and in analgesic activity stands between morphine and codeine.

Benzylmorphine or Peronin is seldom used, the benzyl group antagonising the analgesic action of the morphine residue.

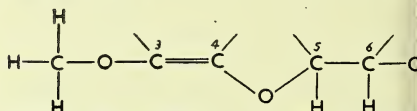


Fig. 4. Carbon atoms 3, 4, 5, and 6 of methylmorphine showing attachment of methoxy ( $\text{O-CH}_3$ ) group to carbon atom 3.

### Morphine Esters

Diacetylmorphine (diamorphine or Heroin) results from the acetylation of both the hydroxyl radicals of morphine (see figure 5).

The analgesic action of diacetylmorphine is more rapid and greater than that of morphine. The history of the drug illustrates the dangers attending the commercialisation of alleged addiction-free substitutes for morphine. Initially, diacetylmorphine (as Heroin) was advocated as a non-constipating "cure" for the treatment of morphine-addiction. Glycylheroin, and diamorphine linctuses proved especially effective in alleviating incessant night cough, and their use extended rapidly between 1910 and 1920. Addition to heroin (with its intensive mental and moral degradation) followed free access to the drug. In New York over 2 per cent. of the population became heroin addicts. The manufacture and consumption of diacetylmorphine has been prohibited in the United States since 1925 and later in more than twenty other countries. Elsewhere, under the 1925 Geneva Convention, all preparations containing any proportion of diacetylmorphine must be dealt with as a Dangerous Drug. Control of international traffic in the drug is more strict than that for any other narcotic. Benzoylmorphine represents one of

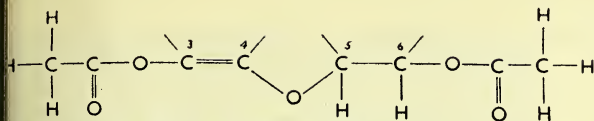


Fig. 5. Acetyl groups ( $\text{CH}_3\text{CO}-$ ) attached to carbon atoms 3 and 6 in diacetylmorphine (diacetylmorphine).

the "other esters of morphine" but none in the United Kingdom is authorised to possess this Dangerous Drug.

### Dihydro Derivatives of Morphine

Dihydromorphine (figure 6) results from hydrogenation of the double bond of morphine at 7:8. It is three times as powerful as morphine in analgesic and toxic effects. Known as paramorphan, it appears to have no advantage over morphine and is seldom used.

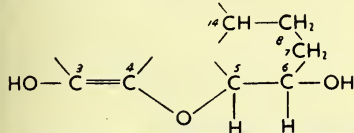


Fig. 6. Part structure of dihydromorphine showing hydrogenation (to  $\text{CH}_2$ ) at 7 and 8.

Methyldihydromorphine is remarkable for the duration of its analgesic action but not available for medicinal use.

Dihydrodesoxymorphine (desomorphine) devoid of the oxygen atom at 6 in figure 6 (i.e., has H in place of OH). Its analgesic activity is approximately ten times that of morphine, against only thrice its toxicity, its action very rapid but of only short duration. It is used in Switzerland under the name of Permonid.

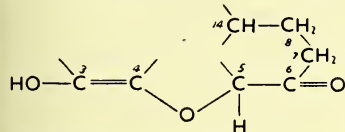


Fig. 7. Part structure of dihydromorphinone (Dilaudid) with CO group on carbon atom 6.

Dihydromorphinone (known as Dilaudid) has a ketonic (CO) group at 6 in place of the alcoholic ( $\text{CH}_2\text{OH}$ ) group of dihydromorphine. As an analgesic it is five times stronger than morphine, with marked respiratory (depressant) action but is less emetic and constipating. Tolerance (with reduced dosage) is more slowly developed. The drug is used to relieve incessant dry cough.

Methyldihydromorphine (or metopon) is regarded as having the chemical structure shown in figure 8, with the additional  $\text{CH}_3$  at position 7. It possesses double the effect of morphine and is being made under experimental licence in this country for relieving pain in cases of inoperable cancer. Absence of nausea is coupled with slow

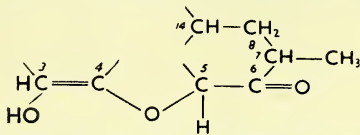


Fig. 8. Part structure of methyldihydromorphinone (metopon) with additional  $\text{CH}_3$  group at position 7.

development of dependence on the drug. Tolerance can be delayed or interrupted by withholding the drug occasionally for twelve hours or as long as the incidence of pain permits.

### Codeine Derivatives

Dihydrocodeine (Paracodin) is obtained by hydrogenation of the double bond of codeine (at 7 and 8), and has uses in medicine similar to those of codeine. Its omission (by inadvertence) from the 1931 Geneva Convention, was rectified in 1951 by the addition of dihydrocodeine and acetyldihydrocodeine to Part III of the Dangerous Drugs Act, 1951.

### Thebaine and Drugs made from Thebaine

Thebaine or codeine methyl ether contains one more double bond than codeine (see figure 9). It has two ethylenic linkages at 6:7 and 8:14 (instead of one at 7:8 in codeine). Hydrogenation yields dihydrothebaine with additional hydrogen atoms at 8 and 14.

Thebaine is the most toxic of the phenanthrene alkaloids of opium. It has a convulsant action similar to, but less severe than, that of strychnine.

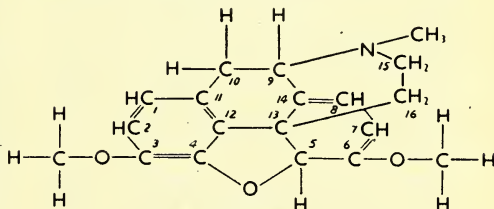


Fig. 9. Thebaine

Thebaine is essentially a "conversion" drug, being the source of the "dihydrocodeinones" (Eucodal, Diconid and Acedicon).

Dihydrocodeinone (or Diconid) is prepared by the acid hydrolysis of dihydrothebaine. Its activity is midway between that of morphine and codeine. In medicine it is used for its specific action on the cough centre to control irritant cough.

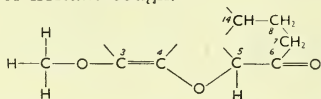


Fig. 10. Part structure of dihydrocodeinone (known also as "Diconid" and hycodan).

Acetyldihydrocodeinone (figure 11) has an anodyne action between ethylmorphine and diacetylmorphine. It is used as a cough sedative in Germany and some countries in which diacetylmorphine is banned.

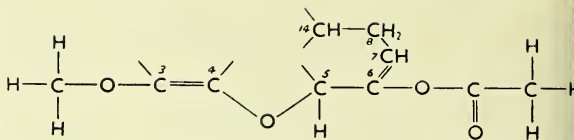


Fig. 11. Part structure of acetyldihydrocodeinone (known as "Acedicon")

Dihydrohydroxycodeinone, also described as dihydro-oxycodeinone, is seen from figure 12 to have an additional alcoholic hydroxyl (OH) at position 14. It is used as a substitute for morphine with less by-effects (nausea, etc.).

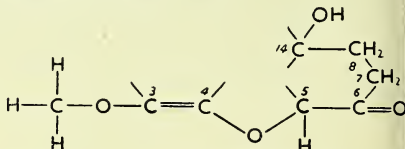


Fig. 12 Part structure of dihydrohydroxycodeinone (known as Eucodal)

## MISCELLANEOUS INQUIRIES

**Solvent for Plastic.**—*W.B.*—Ethylene dichloride or chloroform is suggested by the makers as a suitable solvent for Perspex.

**Availability of Loofahs.**—*C. McK.*—As loofahs may now be imported on open general licence (see *G. & D.*, March 31, p. 394) importers will be obtaining supplies from Japan, the principal pre-war producer. Small token supplies of Japanese loofahs will be available at first but the quantity imported is expected to increase gradually each month. Hitherto most of the loofahs supplied were produce of African colonies.

**Sending Medicines to Spain.**—*A. A. B.*—The Poisons Act and Rules do not apply to exported goods, and there is no objection, so far as British regulations are concerned, to sending a Schedule IV medicine to Spanish territory. The medicine may, however, be a scheduled poison in Spanish law, and in addition no pharmaceutical product may be imported into Spain unless it is registered with the health authorities. If a product is registered the package is required to bear the name of the responsible pharmacist on the manufacturer's premises.

**Factory Eye Drops.**—*T.B.C.*—Factory eye drops are supplied only for use in first-aid cupboards in factories. They are ex-

empt from the Dangerous Drugs Act but remain First Schedule poisons and should be supplied only on a signed order or of the signature of the person responsible for their custody. For export purposes factory eye drops remain Dangerous Drugs and may only be supplied under licence. The form of container prescribed on form 923 Factory Department, Ministry of Labour and National Service, is a bottle containing about  $\frac{1}{2}$  oz. or 15 c.c. with a camel-hair brush fitted to the cork and pendant in the fluid.

**Printing on Polyethylene.**—*H. J. T.*—The printing of polyethylene containers may be effected by a combination of printing and fusion of the surface. Without the use of heat-transfer printing machines, the best expedient is to devise a method of heating the platens, or to print and make use of a high frequency current to fuse the print into the base, or to inject the pigment into the polyethylene by means of an air-spray gun. The inks used for any of those methods would probably be of aniline type. The silk-screen method of printing may also be used, applying the inscription in two printings, the first time with an ink specially formulated for the purpose by one of the specialist printing-ink manufacturers, the second time with an ordinary silk-screen ink, with or without colour.

# C. & D. REFRESHER COURSE for Pharmacists

Compiled by  
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Assisted by  
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## NO. 3—ISOTONIC SOLUTIONS

*"I have nothing to offer but blood . . . tears and sweat."*

MR. WINSTON CHURCHILL, 1940

THE term "isotonic" is used to describe solutions having the same osmotic pressure. Osmotic pressure may be demonstrated when an aqueous solution of, say, sugar is separated from water by a piece of parchment or other semi-permeable membrane. The water molecules pass readily through such a membrane but the sugar molecules cannot. This results in the sugar solution becoming diluted, pressure being exerted in the process. As a result of much research, and the use of many types of membrane and forms of apparatus, the fundamental laws of osmotic pressure have been demonstrated. The basic fact, one of delightful simplicity, is that the osmotic pressure of a solution is proportional to the concentration of particles in it. The term particle is used here to include both ions and molecules. It will be shown later that this and other related facts may be used in making calculations concerning isotonic solutions. First of all the medicinal importance of such solutions must be considered.

### Uses of Isotonic Solutions

In medicine and pharmacy the term "isotonic solution" is often used to describe a solution which is isotonic with blood serum. It should always be remembered that that is a restricted use of the word. Similarly, the terms "hypotonic" and "hypertonic" are used in medicine and pharmacy to describe solutions that have respectively a lower and a higher osmotic pressure than blood serum. It may be expected that if solutions are to be injected into the blood stream, some disturbance of the blood and related tissues may occur, and blood corpuscles may even be destroyed. The corpuscles are minute sacs, the surrounding membrane of which is semi-permeable. If some blood cells are placed in water, the water molecules pass through the membrane into the solution within the cell, eventually causing the membrane to burst and the red colouring

matter to escape (i.e., hæmolysis). If blood cells are placed in a solution hypertonic with regard to blood, water will be lost from the cells to the stronger solution outside, and the membrane will crinkle and shrink, though it will not be destroyed. Those effects do not occur if blood corpuscles are placed in a solution that is isotonic with blood serum.

Solutions for injection, therefore, are usually made "isotonic," though sometimes that is not possible, sometimes not necessary, and sometimes not desirable. The following list summarises the cases:—

1. Large volumes which are injected to make good fluid loss are made isotonic. Under this head are included physiological saline solution; the old "blood substitute" (gum saline solution); and the latest solution of this type: polyvinyl pyrrolidone.
2. The need for isotonicity in small volumes of solution such as 1 mil or min. 10 is not important.
3. When it is necessary to inject a relatively large amount of medicament, a very large volume of solution might be necessary if the solution were required to be isotonic. In such cases it is usual to use a hypertonic solution. Injection is carried out slowly and the solution is sufficiently diluted by the circulating blood.
4. Hypertonic solutions are injected deliberately when varicose veins are to be occluded.
5. Eye drops are, ideally, made isotonic with tear secretion, the osmotic pressure of which is the same as that of blood serum. This has the effect of reducing pain.
6. For the same reason, nasal solutions are commonly made isotonic with blood serum.
7. It is usually considered an advantage to use such solutions for other delicate tissues or where the surface membrane has been damaged or lost.

It has been mentioned that the osmotic pressure of a solution depends on the concentration of particles in it. Other properties of solutions also depend on this factor. They are vapour pressure and freezing and boiling points. Measurement of any one of these factors is, therefore, in effect, a measurement of osmotic pressure. Freezing-point methods are usually selected, since they are simpler and more accurate. The osmotic pressure of a solution may, of course, be calculated mathematically from particle-concentration data.

### Calculations Based on Particle Concentration

It has been shown by the practical methods mentioned that blood serum has an osmotic pressure approximately equivalent to a 0.9 per cent. solution of sodium chloride. This may be used as a basis of calculation.

In 100 mls of solution the number of particles present will be proportional to:—

$$\frac{W \times n}{M}$$

where  $W$  = the weight of substance,  $M$  = the molecular weight of the substance, and  $n$  = the number of ions into which the molecule of the substance dissociates.

For a 0.9 per cent. sodium chloride solution this will be:—

$$\frac{0.9 \times 2}{58.5}$$

Supposing that a solution containing  $x$  per cent. of a medicament is to be made isotonic with blood serum. The figure proportional to the number of particles in the medicament will then be:—

$$\frac{x \times n'}{M'}$$

where  $x$  = the weight of medicament in 100 mls,  $M'$  = its molecular weight, and  $n'$  = the number of ions into which one molecule dissociates.

To this solution must be added sufficient solute (usually sodium chloride) to achieve isotonicity with blood serum. The figure for that, plus the figure of the medicament, should, therefore, be equal to the figure for 0.9 per cent. sodium chloride. Thus the following equation is obtained:—

$$\frac{0.9 \times 2}{58.5} = \frac{x \times n'}{M'} + \frac{W \times 2}{58.5}$$

Standard                      Medicament                      Added Na Cl

In the equation,  $W$ —the only unknown—is easily found. Note that the figure is percentage since the volume of solution considered is 100 mls. The obvious defect of this method is the assumption that molecules will be completely dissociated. This is not so, however, and with certain salts the assumption would introduce serious errors.

### Calculations Based on Freezing-point

Calculation from freezing-point is a more satisfactory method, provided the necessary information is available. The method is outlined in the British Pharmaceutical Codex.

The freezing-point of blood serum is  $-0.52^{\circ}\text{C}$ . All solutions that are isotonic with blood serum have the same freezing-point. 0.9 per cent. sodium chloride solution, for example, freezes at  $-0.52^{\circ}\text{C}$ . In other words, 0.9 per cent. of sodium chloride lowers the freezing-point of water by  $0.52^{\circ}\text{C}$ . Concentrations of about the same strength give a proportional lowering of freezing-point. For example, 0.5 per cent. sodium chloride lowers the freezing-point of water by:—

$$\frac{0.52 \times 0.5}{0.9}^{\circ}\text{C}.$$

The B.P.C. gives the depression of freezing-point for 1 per cent. of a number of substances. This depression is indicated by the letter "b."

Now a medicated solution that freezes at  $-a^{\circ}\text{C}$ . will be made isotonic with blood serum by adding sufficient sodium chloride or other substance to lower the freezing-point to  $-0.52^{\circ}\text{C}$ , i.e., by  $(0.52 - a)^{\circ}\text{C}$ .

A depression of  $(0.52 - a)^{\circ}\text{C}$ . will be given by

$$\frac{0.52 - a}{b} \text{ per cent.}$$

since a depression of "b"  $^{\circ}\text{C}$ . is given by 1 per cent. of the substance.

Note that the depression  $a^{\circ}\text{C}$ , due to the medicament, is obtained by multiplying the percentage figure for the medicament by the depression caused by 1 per cent. of it (given in the B.P.C.).

The following example should clarify the method:—

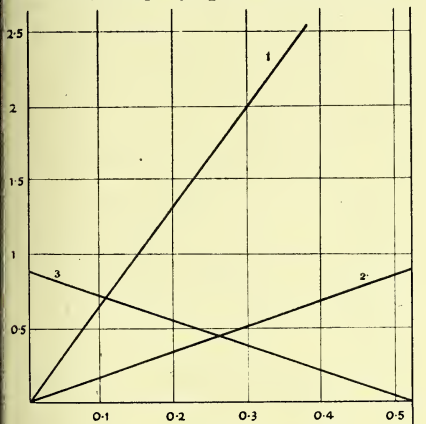
*Prepare 20 mls of a solution of cocaine hydrochloride, 2 per cent., made isotonic with blood serum using sodium chloride*

or cocaine hydrochloride "b" (see P.C. list) =  $0.090^\circ$ . Therefore "a" for cocaine hydrochloride is  $0.18^\circ$ , since the length is 2 per cent. For sodium chloride "b" is  $0.576^\circ$ . Hence the required percentage of sodium chloride is:—

$$\frac{0.52 - 0.18}{0.576} = 0.59 \text{ per cent. approx.}$$

### Recent Progress

A notable contribution to knowledge of isotonic solutions has been made recently by K. Pedersen-Bjergaard, Ph.D. (chief pharmacist, Bispebjerg Hospital, Copenhagen).



1. Curve for medicament
2. Sodium chloride curve
3. Reversed sodium chloride curve

agen), and his assistants, who carried out numerous careful investigations on the freezing points and vapour pressures of solutions of various medicaments over a suitable range of concentrations. Using the freezing-point method they made allowance for the fraction of pure water that separates as ice before the solution as a whole freezes. Their results have shown that the figures given in many pharmacopœias throughout the world and number in the B.P.C. (which have now been corrected) were wrong. Their most remarkable discovery was that the universally accepted figure for the lachrymal secretion was wrong. The freezing-point of lachrymal solution, given previously as  $-0.86^\circ\text{C.}$ , was found to be  $-0.52^\circ\text{C.}$  (the same as for blood serum).

The practical value of this work has been to provide accurate graphs for a

number of medicaments showing variations of depression of freezing-point with change of concentration. Thus it is easy to read the depression of freezing-point for any concentration of the medicament, and on the same graph the concentration of sodium chloride necessary to increase that depression to that of blood serum (i.e.,  $0.52^\circ\text{C.}$ ). The use of the graphs has been made even more simple by an ingenious arrangement—the addition of a reversed sodium-chloride curve. The method of use of the curve is shown in the example below, using the diagram in column 1.

*A solution containing 2 per cent. of medicament x is to be made isotonic with blood serum using sodium chloride.*

From the graph it is seen that the depression of freezing-point due to 2 per cent. of medicament x is  $0.3^\circ\text{C.}$ . Therefore a depression of  $(0.52 - 0.3)^\circ\text{C.}$  (i.e.,  $0.22^\circ\text{C.}$ ) is still required. This may be read off in terms of percentage of sodium chloride, using the normal sodium chloride curve, and is 0.375 per cent.

The figure may be more readily found, however, as follows. A vertical line is drawn where the 2 per cent. horizontal cuts the medicament curve. The point where this vertical line cuts the reversed sodium chloride curve indicates the percentage of sodium chloride required, viz., 0.375 per cent.

### REFERENCES :

British Pharmaceutical Codex, 1948.  
The Preparation of Solutions Iso-osmotic with Blood, Tears, and Tissue. Heinemann Medical Books, Ltd., 99 Great Russell Street, London, W.C.1.)

## REVISION QUESTIONS

1. 500 mls of a 3 per cent. solution of dextrose is to be made isotonic with blood serum. How much sodium chloride must be included in the preparation?

2. Prepare 100 mls of an eye solution containing 0.5 per cent. of silver nitrate and sufficient potassium nitrate to render it isotonic with tear secretion.

Depression of freezing-point of 1 per cent. solutions of dextrose =  $0.10^\circ\text{C.}$ ; silver nitrate =  $0.19^\circ\text{C.}$ ; potassium nitrate =  $0.324^\circ\text{C.}$ ; sodium chloride =  $0.576^\circ\text{C.}$  Repeat calculation No. 2 using the particle-concentration method. (Molecular weight of silver nitrate = 169.888, and of potassium nitrate = 101.104). The two answers to No. 2 will not be identical but the small differences involved are well tolerated by the eyes.

(Answers on p. 606)

## SHOP CLOSING HOURS IN NORTHERN IRELAND

A COMMITTEE on Shops Legislation appointed by the Minister of Home Affairs in Northern Ireland, in its report recently published, recommends action on recommendations which it received from the Ulster Chemists' Association.

### What Strict Observance Would Entail

Under the rota arrangements, Belfast pharmacies take turns to be available between 8 and 9 p.m. on weekdays and at certain hours on Sundays for the sale of medicines and exempted goods. At busy times there must be many persons at 8 p.m. all wanting prescriptions to be made up. Such circumstances, making it almost impossible to fulfil the requirement that the shop must "be kept open only for such times as is necessary for serving a customer who has sought admission for the purpose of purchasing a specified article or specified articles of this class," had not been envisaged in framing the Act. To observe the law, a chemist has to unlock the door, admit a customer, relock the door, prepare the prescription, let out the customer, and then admit the next one. If the law were to be strictly observed it would involve a great waste of time besides inconveniencing the chemist and causing discomfort to would-be customers. The Committee therefore recommends that, where a chemist is observing a rota agreement approved by the Northern Ireland General Health Services Board, he should be permitted to keep his shop open after the closing hour for pharmacies for the sale of medicine or medical or surgical appliances, including baby food and feeding appliances, provided a notice is prominently displayed that the shop is open to sell those goods only.

The Ulster Chemists' Association had asked that the expression "closed shop" should be defined. Certain chemists had allegedly been closing as required on half-days but with blinds down and the assistants in the shop ready to admit customers and to serve them in response to knocking on the door. That appeared to arise from the Schedule to the Shops Act permitting the "sale of medicines, etc., to persons who seek admission for this purpose." The Committee records: "We are not convinced that there is any widespread abuse of the Act in this connection and we feel that this matter should be left to the authorities for enforcement." The U.C.A. had also pointed out that, where only one pharma-

ceutical chemist was employed in a pharmacy, that pharmacy could not legally take part in a rota arrangement. If the chemist worked on his half-holiday he must get half-holiday on another day in the same week, which would cause the closing of the shop on that day. The difficulty did not arise where the owner of the business managed it himself, and was a pharmaceutical chemist, since he was not bound to take a half-holiday. The U.C.A. therefore requested that the half-holiday provision should be waived to permit pharmaceutical chemists to be employed on their half-holiday without any legal obligation to give them another half-holiday (or time off in lieu) in respect of not more than three periods of rota duty in six months. The Committee, whilst regretting the inconvenience caused to owners of chemist shops, were unwilling to recommend that a right should be taken away from any workers after it had been granted by Parliament. The U.C.A. further reported that during the influenza epidemic it had been difficult for pharmacies to comply with the law owing to the extraordinary demand for medicines, and the Committee says "We consider it essential that the Minister should have powers to ensure that medicines are readily available at such times of stress, and we therefore recommend that power should be given to it to make local or general orders providing for the relaxation of the compulsory closing hours."

### Not "Mixed Traders"

The Association of the Municipal Authorities had urged that chemists should not have the right to choose their own half-day, because they were really mixed traders. The Committee took the view that chemists could not be described as anything else but chemists. They therefore rejected the suggestion.

On a suggestion made by the U.C.A. the Committee recommended that local authorities should be given power to fix the late day at 8 p.m. on request from at least two-thirds of the traders engaged in the trade concerned.

**An Anglers' Story.**—Sea-anglers at Hartlepool, co. Durham, report that since effluent from a penicillin factory at Barnard Castle has been discharged into the sea near Hartlepool their winning catches have increased in size about six-fold.

## TRADE REPORT

spot quotations for pharmaceutical chemicals represent the prices for wholesale quantities of standard quality. Prices of crude drugs and essential oils vary as to brand or grade.

### London, October 31

CONDITIONS in the market for PHARMACEUTICAL and FINE CHEMICALS remain much the same as in recent weeks. Demand for products in short supply from scarcity of raw materials continues on a high level, but there were no important price changes during the week.

Business in the CRUDE DRUGS market was rather brighter, as a result of seasonal requirements, but the level of demand was still well below normal for the time of year. ERGOT remains firm at origin; spot supplies, however, can be bought at 69s. per lb. (3s. 6d. per lb. less than the shipment offers). The cost of spot material at this period in 1950 was 47s. 6d. per lb., and even at the end of the year had only risen to 62s. 6d. In November 1949, the cost was 22s. per lb. so that a price which is then five times its pre-war price has more than trebled in the past two years. ZANZIBAR CLOVES have become considerably firmer at origin, and this has materially affected spot supplies. Prime Cape ALOES has eased slightly at origin. Forward offers of CASCARA SAGRADA are firmer. A limited quantity of AGAR is to be imported from Japan under individual licence up to the end of March 1952, according to a notice issued by the Ministry of Food and the Board of Trade.

With few exceptions the trend of prices in ESSENTIAL OILS market is downward. Spot prices for ANISEED have again declined during the week. CASSIA and ATCHOULI also show a considerable mark down from previous spot quotations. SASSAPARILLA is easier forward by about 1s. per lb. The market for PEPPERMINT, however, is an exception; Chinese *Arvensis* and Italian "Mitcham" *Piperita* are firmer. There have been very few offers of CITRONELLA from Ceylon; nevertheless, spot prices have still held. This is largely due to buyers being uninterested in the oil at the present time.

### U.S. Drug and Chemical Report

#### New York, October 24

THE National Production Authority has reported that production of chemicals during the first half of 1951 has risen sharply, some items by as much as 100 per cent. Realising the tight supplies of certain chemicals the N.P.A. have imposed inventory restrictions on sixty-five items including PHENOL thus holding customers down to a practical minimum of stocks in future. Spot lots of Brazilian MENTHOL are quoted at \$9.70 per lb., and Chinese \$10.40 marking a new low level for the year. CRUDE DRUGS are in small demand and SPICES are dull, the quotations in many cases being not far above shipping

prices. September production at central gum stills was reported at 23,340 barrels of TURPENTINE and 66,210 drums of RESIN. This was 5 per cent. less than production during September, 1950. Over the period April-September, production of turpentine was down by 9 per cent. and resin by 10 per cent. compared with the same period in 1950. General uncertainty and high prices have induced caution among buyers of ESSENTIAL OILS. Some downward price revisions have occurred and CEDAR WOOD is 55 cents per lb. (down 5 cents); GINGER, at \$20.50, is down \$1.50; natural PEPPERMINT, at \$7.20, is down 15 cents; PEPPERMINT, U.S.P., at \$7.55, is down 15 cents, and California ORANGE, at \$2.15, is down 10 cents.

### Pharmaceutical Chemicals

BORAX.—Prices for B.P. grade, in quantities of 1 ton and upwards are as follows:—Granular, £48 10s.; crystals, £51; powder, £52; extra-fine powder, £53 per ton. Prices of commercial range from £39 10s. to £44 per ton, as to type, and dehydrated borax is now £60 10s. per ton. In 1-cwt. bags; carriage paid in Great Britain. Surcharges for small quantities as previously.

BRUCINE.—ALKALOID is from 1s. 8d. to 1s. 9½d. per oz., and NITRATE and SULPHATE from 1s. 7d. to 1s. 8½d. per oz., as to quantity.

DITHRANOL. — Advanced. Price is now 407s. per kilo.

GLUCOSE.—Prices (per cwt.) for liquid glucose sold by manufacturers (or distributors) to consumers in original containers are as follows:—In tanks (2 tons or over), 72s. 6d.; in 3-cwt. barrels or over, 74s. 4½d.; in 5 to 6-cwt. drums, 73s. 9d.; in 1-cwt. drums or pails, 74s. 1½d.; in 56-lb. tins, 76s. 6d.; in 28-lb. tins, 78s. 3d.; in tins or jars of 14-lb. capacity or less, 80s. Higher prices up to 99s. 6d. per cwt. are charged where the buyer requests the breaking down of an original container of 3-cwt. or more capacity.

HEXAMINE. — Current quotations from makers are from 2s. 3d. to 2s. 6d. per lb., as to quantity and pack.

HYOSCINE HYDROBROMIDE. — Quotations are from 90s. to 95s. per oz., according to quantity, for British material.

ISOPROPYL ALCOHOL.—Prices range from 15s. 3d. to 16s. 9d. per gall., as to quantity.

MERCURY DERIVATIVES.—Nominal quotations (per lb.) for 1-cwt. lots are: AMONIATED, B.P., lump or powder, 21s. 9d.; PERCHLORIDE, B.P., powder, 19s. 6d.; CHLORIDE, B.P. (calomel), 22s. 6d.; OXIDES, B.P.C. levigated, or yellow B.P., 24s.

**METHYL SALICYLATE.** — In 1-cwt. lots, price is 3s. 3d. per lb.; 56-lb., 3s. 3½d.

**OPIATES.** — Home-trade rates (per oz.) for quantities of 5 oz. and upwards are as follows:—**CODEINE.** — Alkaloid, hydrobromide and iodide, 58s. 6d.; hydrochloride and sulphate, 51s.; phosphate, 44s. **MORPHINE.** — Alkaloid bimeconate, and tartrate, 62s. 6d.; hydrochloride, acetate, hydrobromide and sulphate, 52s.; **DIAMORPHINE.** — Alkaloid, 62s.; hydrochloride, 56s. 6d.; **ETHYLMORPHINE.** — Alkaloid, 65s. 6d.; hydrochloride, 55s. 6d.

**PANCREATIN.** — 1-cwt. lots of B.P. are quoted at 9s. per lb., and 28-lb. at 10s. U.S.P., 1-cwt. lots, 11s. 6d. per lb.; 28-lb., 12s. 6d.

**PARALDEHYDE.** — Carboy lots are now 2s. 2½d. per lb.; 24 winchesters, 2s. 4d.; 12 winchesters, 2s. 7d. per lb.

**PHENYLACETIC ACID.** — 1-cwt. lots are quoted at 5s. per lb.; smalls, up to 5s. 9d. lb., 12s. 2d.; 14-lb., 12s. 6d.; 7-lb., 13s.

**POTASSIUM BROMATE.** — In 5-cwt. lots, 7s. per lb. Small quantities prices range up to 8s. 9d. per lb.

**POTASSIUM NITRATE.** — Pharmacopoeial quality is 145s. per cwt. (crystal, granular or powder) and commercial, 90s.

**ROCHELLE SALT.** — Rates (per cwt.) for powder or granulated material are as follows:—In 5-cwt. lots, 220s., per cwt.; 1-cwt., 222s. 6d. per cwt. Smaller quantities are from 2s. 5d. to 2s. 8d. per lb. **SEIDLITZ POWDER**, ordinary strength is 171s. 3d. per cwt. in 1-cwt. lots; smalls, from 2s. to 2s. 3d. per lb. Extra-strong is 185s. 3d. per cwt. and 2s. 1d. to 2s. 4d. for small quantities.

**SALOL, B.P.C.** — Current quotations for quantities of 1 cwt. are 9s. to 10s. 6d. per lb., according to pack; 28-lb., 10s. 6d.; 14-lb., 13s. 0½d.; 7-lb., 16s. 1d.

**SODIUM SALICYLATE.** — Rates are: 1-ton lots in bulk, 3s. 5d. per lb.; 5-cwt., 3s. 5½d.; 1-cwt., 3s. 6d. Scheduled rates in the home market for 28-lb. and under 1-cwt. are from 4s. 1d. to 4s. 5d. per lb., as to pack.

**SODIUM SULPHITE.** — Prices are as follows:—**ANHYDROUS** powder, in 4-ton lots, £48 per ton, packed in 1-cwt. free drums. **Pea CRYSTALS** (Photographic), in 4-ton lots, £31 per ton in free kegs or £23 per ton in 1-cwt. bags. Surcharges: 2 tons, 10s.; 1 ton, £1; 10 cwt., £2.; 5 cwt., £3; 1 cwt., £6 more than above rates.

**TEREBENE.** — For 1-carboy lots, 4s. 2d. per lb. is asked. In winchesters, prices are from 4s. 3½d. to 5s. 2d. per lb.

**TERPIN HYDRATE.** — Prices are from 7s. 6d. to 8s. per lb., as to quantity.

**TERPINEOL.** — Prices of B.P. grade are from 4s. 6d. to 4s. 9d. per lb., as to quantity.

## Crude Drugs

**ALOES.** — Prime Cape on the spot is 245s. per cwt.; forward offers are easier at from 210s. to 215s., c.i.f., for prompt shipment

**BALSAMS.** — *Canada* is offered at 28s. per lb. on the spot; no offers from origin. *Maranham Copaiba*, soluble on the spot is 17s. 6d. per lb., duty paid; insoluble, 10s. c.i.f. *Peru* is 18s. 3d. per lb., duty paid and 15s., c.i.f., for shipment. *Tolu* on the spot is about 41s. per lb. for the natural and 32s. 6d. for B.P. quality.

**BISMUTH.** — In minimum 5-cwt. lot **METAL** is 28s. per lb.

**BUCHU.** — Short round leaves on the spot are offered at 2s. per lb.; for shipment 1s. 9d., c.i.f.

**CAPSIUMS.** — Abyssinian are 115s. per cwt. on the spot and Nigerian, 210s., duty paid.

**CARDAMOMS.** — New-crop Aleppy greens for October-November shipment, is quoted from the origin at 19s. 6d. per lb., c.i.f. spot supplies are 24s. per lb. Aleppy seeds No. 1, on spot, 32s. 6d.

**CASCARA SAGRADA.** — New-peel American bark is 325s. per cwt. on the spot, duty paid, and 275s., c.i.f., nominal, for shipment. 1950 bark on the spot is from 315s. to 355s. per cwt., duty paid.

**CASSIA BARK.** — Whole, for November shipment is 120s. per cwt., c.i.f.: in bond 125s.

**CHAMOMILE FLOWERS.** — New-crop Belgian (best quality) is about 5s. 6d. per lb. on the spot. For old crop, 5s. per lb. is asked.

**CHILLIES.** — Sierra Leone on the spot are quoted at 270s. per cwt.; for shipment 240s., c.i.f.; East African (Mombasa) 342s. 6d., ex warehouse; for shipment 300s., c.i.f.

**CINCHONA.** — *Succirubra* chips of East and West African origin testing over 6 per cent. are quoted at 1s. 9d. per lb.

**CINNAMON.** — For shipment (c.i.f.) 0000, 3s. 1d.; 000, 2s. 11d.; 00, 2s. 10d.; 0, 2s. 8½d.; firsts, 2s. 1½d. seconds, 2s. 0½d.; thirds, 1s. 11½d.; quillings, 1s. 10½d.; featherings, 1s. 0½d. chips, 5½d. per lb.

**CLOVES.** — Zanzibar on spot, quoted at 4s. 6d. per lb.; for prompt shipment 4s. 5d., c.i.f.

**COLCHICUM.** — Quiet. Corms on spot are offering at from 2s. 3d. to 3s. 6d. per lb. seeds: forward offers at 6s. per lb., duty paid.

**ERGOT.** — Forward prices of Portuguese are nominal at about 72s. 6d. per lb. Spot supplies are 69s. per lb.

**GINGER.** — African on the spot is from 260s. per cwt.; for shipment, 240s., c.i.f. Jamaican on the spot is from 470s. to 490s. per cwt., as to quality.

**GUM ACACIA.**—Kordofan cleaned sorts on spot, quoted at 125s. per cwt.; November-December shipment, 115s., c.i.f.; new-crop, February - March, 1952, shipment, 112s., c.i.f.

**IPECACUANHA.**—Offers of Colombian for November shipment are 55s. per lb., c.i.f., and for spot about 59s. per lb. November shipment of Nicaraguan quoted at 62s., c.i.f.; spot, 65s. per lb. Brazilian, spot, 60s. per lb.

**MACE.**—West Indian pale blade is 9s. 6d. per lb.; for shipment, 9s., c.i.f.

**SARSAPARILLA.**—Jamaican native red is 2s. 7d. on the spot and for shipment, 2s. 3½d., c.i.f.

**SEEDS.**—**ANISE.**—Market unchanged. Cyprus is 160s. per cwt.; Turkish, 150s. per cwt., in bond, and 160s. per cwt., duty paid; all spot London. **CELERY.**—Indian sold at 1s. 10½d. per lb., spot London. **CARAWAY.**—Dutch is firm at 125s. per cwt., duty paid in London. **CORIANDER.**—Market quiet. Spot Morocco is 92s. 6d. per cwt., duty paid (87s. 6d. in bond); Argentine splits, 80s. per cwt., duty paid; Indian, sellers at 120s. per cwt. Shipment: Morocco quoted at 87s. 6d. per cwt., c.i.f. October - November shipment; Indian not offered. **CUMIN.**—Market dull. Spot: Cyprus is 225s. per cwt.; Indian, 220s.; Morocco, 230s., duty paid, and Malta, 225s. per cwt. Shipment: Cyprus, 195s. per cwt.; Indian, 195s.; Morocco, 192s. 6d., and Malta, 207s. 6d. per cwt. **DILL.**—Indian on spot is quoted at 80s. per cwt. **FENNEL.**—Indian is firm at 155s. per cwt., spot London. **FENUGREEK.**—Morocco, spot London or Liverpool, is offered at 7s. 6d. per cwt., duty paid. **MUSTARD.**—English new-crop ready for delivery in about two to three weeks. From 90s. per cwt. to 110s. per cwt. is quoted, delivered London.

**SENEGA.**—Prices for shipment are about 6s. per lb., c.i.f.; spot supplies are 16s. 9d. per lb.

**SHELLAC.**—Steady. Spot quotations are: F.O.T.N., pure, 385s.; F.O. Standard 1, 95s., and fine orange, 410s. to 480s. per wt., ex-London warehouse.

**STROPHANTHUS.**—*Kombé*, 100 per cent. is quoted at 21s. 6d. per lb. on the spot. Spot supplies of *Gratus* are offered at 7s. 6d. per lb.

**STYRAX.**—Spot is from 9s. 3d. per lb., duty paid, and 8s. 3d. in bond.

**VALERIAN.**—Whole Belgian on the spot is quoted at 200s. per cwt., spot., and 190s., c.i.f., for shipment. Indian is 200s. per wt., spot; for shipment, 160s., c.i.f., quoted. Spot Russian is 180s. per cwt.

**VANILLIN.**—Current rates (per lb.) are as follows:—5-cwt. lots, 45s.; 1-cwt., 5s. 3d.; 56-lb., 45s. 6d.; smaller quantities, 45s. 9d.

**WAXES.**—**BEES'.**—Dar-es-Salaam on the spot is 600s. per cwt.; shipment, 560s., c.i.f. Benguela on the spot is 600s., duty paid (in bond, 550s.). October-November shipment, 515s., c.i.f. **CANDELILLA.**—Spot supplies are offered at 610s. per cwt.; shipment, 605s., c.i.f. **CARNAUBA.**—Prime, yellow, spot, 1,080s. per cwt. Fatty grey, spot, 925s. per cwt. **MONTAN.**—Reiback crude on the spot is 130s. per cwt. **OURICURI.**—Spot, 0.3 per cent. impurities, 825s. per cwt., shipment, 750s., c.i.f. **SPERMACETI.**—Spot supplies are from 2s. to 2s. 3d. per lb.

**WITCH HAZEL.**—Leaves on the spot are quoted at from 2s. 9d. to 3s. per lb.

## Essential and Expressed Oils

**ANISE.**—In little demand. Spot quotations are from 9s. 9d. per lb. in original drums; for shipment, 8s. 9d., c.i.f.

**BOIS DE ROSE.**—Brazilian on the spot is from 32s. 6d. to 35s. per lb., as to quantity.

**CADE.**—Supplies of Spanish are from 2s. 6d. to 3s. per lb.

**CANANGA.**—Supplies on the spot are quoted at from 75s. to 80s. per lb.

**CARAWAY OIL.**—English-distilled is offered at 45s.; imported oils in limited supply are from 32s. upwards per lb., for spot.

**CARDAMON OIL.**—In short supply. Quotations are from 455s. to 550s. per lb.

**CASSIA.**—Spot supplies are offered from 22s. to 23s. per lb.

**CEDARWOOD.**—Spot quotations for Kenya are from 5s. 6d. per lb.

**CINNAMON.**—B.P. oil on the spot is quoted at from 67s. 6d. to 70s. per lb. English bark oil is offered at 21s. to 24s. per oz. Ceylon leaf, 15s. 6d. per lb., spot; for shipment, 14s., c.i.f.

**CITRONELLA.**—Spot prices for original drums are: Ceylon, 9s. per lb. Formosa, 8s. 5d. and Java, 11s. Forward quotations are: Ceylon (very few offers), 9s.; Formosa, 7s. 6d.; and Java, 8s. 1d., all c.i.f.

**CLOVE.**—English-distilled bud oil is from 30s. to 31s. per lb., with other grades of B.P. oil at about 25s. Madagascar leaf oil is 18s. per lb. on the spot and to come forward, 16s. per lb., c.i.f.

**CUBEBS.**—English-distilled is offered at from 50s. to 55s. per lb. Imported is quoted at from 60s. to 65s.

**DILL.**—English-distilled oil is quoted at about 62s. per lb. for B.P. quality. Imported oils are offered at from 45s. to 55s. per lb., as to holder. East Indian, 32s. 6d., spot.

**GERANIUM.**—Quiet. Bourbon on the spot is from 165s. to 180s. per lb.

**HYDROCARPUS.**—Spot quotations are about 2s. 3d. per lb.; for shipment, 2s., c.i.f.

**JUNIPER BERRY.** — Imported oils are offered at from 22s. per lb., duty paid; new-crop for shipment is 21s. per lb., c.i.f. English-distilled is offered at 75s. to 95s. per lb., as to seller and grade.

**LAVANDIN.** — Spot quotations are 24s. per lb.

**LAVENDER.** — French, 40-42 per cent. linalol on the spot is from 44s. to 47s. per lb. Spanish spike is steady at 18s. per lb. for spot.

**LEMONGRASS.** — Easier forward. Quotations are about 21s. per lb., c.i.f.; for spot supplies, from 23s. 6d. to 24s. 6d. per lb. is asked.

**LIME.** — Scarce. West Indian distilled is about 70s. per lb., spot, nominal.

**ORANGE.** — In short supply. West African is about 38s. 6d. per lb., duty paid. Palestinian is about 30s. per lb.

**PALMAROSA.** — Spot quotations are nominal 55s. and 52s. 6d., c.i.f., forward.

**PATCHOULI.** — Quiet. Spot supplies of Penang are offered at from 75s. to 80s. per lb.

**PENNYROYAL.** — New-crop for immediate shipment is offered at from 29s. to 35s. per lb., landed, duty paid, as to source. Spot supplies are available at 35s. per lb.

**PEPPERMINT.** — Chinese *arvensis* oil on spot is slightly firmer at 34s. per lb. Brazilian on spot is 28s. per lb. Continental "Mitcham" *piperita* is offering at from 65s. to 67s. 6d., according to origin.

**PINE.** — *Pumilionis* on the spot is quoted at from 18s. to 20s. per lb.; *sylvestris* is at about 11s. per lb. and Siberian (*abietis*) is about 20s. per lb.

**ROSEMARY.** — Spanish on the spot is 7s. 6d. per lb., duty paid.

## Methylated Spirits

**METHYLATORS'** rates per gall. in Great Britain are as follows:—

**Industrial Methylated spirit:** Strength 61 *o.p.*, 500 gall. and over, in one delivery, 7s. 6d.; 100 gall. and under 500 gall., 7s. 8d.; 30 gall. and under 100 gall., 7s. 10d.; 10 gall. and under 30 gall., 8s.; 5 gall. and under 10 gall., 8s. 3d. Strength 64 *o.p.*, 1d. per gall.; 66 *o.p.* (B.P.), 2d.; 68 *o.p.*, 3d.; and 74 *o.p.*, 7½d. more than the above rates. Tank wagon delivery: One halfpenny per gall. off list price:—minimum 500 gall. For industrial methylated spirit of standard toilet quality prices are 3½d. per gall. above foregoing prices.

**Pyridinised industrial methylated spirit:** Strength 61 *o.p.*, 500 gall. and over, in one delivery, 7s. 8½d.; 100 gall. and under 500 gall., 7s. 10½d.; 30 gall. and under 100 gall., 8s. 0½d.; 10 gall. and under 30 gall., 8s. 2½d.; 5 gall. and under 10 gall., 8s. 5½d. Strength 64 *o.p.*, 1d. per gall. more than foregoing rates.

**Mineralised methylated spirit:** Strength 61 *o.p.*, in one delivery, 100 gall. and under 500 gall., 7s. 10½d.; 30 gall. and under 100 gall., 8s. 0½d.; 10 gall. and under 30 gall., 8s. 2½d.; 5 gall. and under 10 gall., 8s. 5½d. Strength 64 *o.p.*, 1d. per gall. more than foregoing rates.

**Methylated resin finish** is 3d. per gallon, and **methylated shellac finish**, 1s. p. gall. over the prices for pyridinised methylated spirit.

**TERMS:** Delivered free and carriage paid on returned empties; cash one month less 2½ per cent.; packages charge credited in full on return.

## Alcohol

**PRICES** (exclusive of duty) of ethyl alcohol per proof gall. are as follows:—

**Plain British Spirit** (95 per cent. G. Lussac, 66 *o.p.*); where the number proof gall. taken over any one year end December 31 is 300,000 or over the price is 4s. 5½d.; 200,000 and less than 300,000 4s. 6d.; 100,000 and less than 200,000 4s. 6½d.; 50,000 and less than 100,000 4s. 7d.; 10,000 and less than 50,000 4s. 7½d.; 2,500 and less than 10,000 4s. 8½d.

**Absolute Alcohol**, 99.5 per cent., 74 *o.p.*, is one penny more per proof gallon than Plain British Spirit; the special high strength (99.9 per cent., 75.2 *o.p.*) threepence more. **Doubly-rectified Alcohol** (S.V.R.), 95.8 per cent., 68 *o.p.* is twopence more per proof gallon, and **P.I. Rectified Alcohol**, 96.1 per cent., 68.5 *o.p.* sixpence more than Plain British Spirit. **R.R. Absolute Alcohol** (re-rectified, 99 per cent., 75 *o.p.*), 14s. per bulk gall. net.

## WORLD TRADE

**Brazil Producing Penicillin.** — Brazil first penicillin plant in Sao Paulo starts production recently.

**Polish Cod-liver Oil Factory.** — The first factory in Poland for the manufacture of medicinal cod-liver oil was opened recently.

**Turkey's Foreign Trade.** — During the first seven months of 1951, Turkey imported pharmaceutical and chemical products valued at £T28.3 millions (equivalent to 4.9 per cent. of total imports).

**West German-Egyptian Treaty.** — The West German Bundestag has ratified a 114-million Marks trade treaty with Egypt under which Germany will send Egypt 57 million Marks' worth of machinery, chemicals and other industrial products.

## Answers to Revision Questions

(see p. 601)

No. 1. 1.9 gm.

No. 2. 1.31 gm.

## NEW BOOKS

**Chemical Manufacturers' Directory.**—x 5½ in. Pp. 193. 8s. Newnham Cowell Gripper, Ltd., 15 City Road, London, C.1. In the eighty-third edition the publishers have brought up to date the list of British and Irish chemical manufacturers and London brokers which the directory traditionally gives. The established form and classifications of the book are maintained.

**A Guide to the Nomenclature used in Organic Chemistry.**—E. H. Tinley, B.Sc., F.C. 8½ x 5½ in. Pp. 16. One shilling. Thomas Waide & Sons, Ltd., Alexandra Works, Kirkstall Hill, Leeds, 5. This pamphlet, originally published in instalments in the "Alchemist," provides a useful summary of nomenclature principles. Every use has been made of different "weights" of type, though lack of uniformity in typography causes untidiness in places. References to standard works in which the subject is treated more fully would have been a useful inclusion.

**Biology for Pharmaceutical Students and Others (second edition).**—S. Mangin, M.A. (Cantab.), and A. R. Hockley, B.Sc. (London). 8½ x 5½ in. Pp. 602. 30s. Baillière, Tindall and Cox, 7 Henrietta Street, London, W.C.2. In the new edition further matter has been added to meet requirements of the 1948 syllabus for the Pharmaceutical Society's Intermediate Examination. Sections of small importance to pharmaceutical students are set in smaller type than the main text. Special attention has been given to technical botanical terms that are extensively used in pharmacognosy and to principles of physiology. There are 317 well labelled diagrams and photographs and a detailed index.

**Fundamental Mechanisms of Photographic Sensitivity.**—Edited by J. W. Mitchell, 9½ x 7 in. Pp. 345. 63s. Butterworths Scientific Publications, Ltd., Bell Yard, Finsbury Pavement, London, W.C.2. Forty-seven research papers which were read at a 1950 conference (from which the book takes its title) held in Bristol comprise the text of the book. The work is divided under the following headings:—"Physical Properties of Silver Halides"; "Production and Properties of Silver Halide Grains in Photographic Emulsions"; "Photographic Sensitivity"; "Latent Image Formation" and "Nuclear Track Emulsions." The information

in the book is, for the most part, of a highly specialised nature. Fundamental photographic mechanisms are discussed from the point of view of their chemistry, physics or applied mathematics. The work is designed for those handling or engaged in research on light-sensitive material.

**Intermediate Practical Chemistry.**—Sylvanus J. Smith, M.A. 7½ x 5½ in. Sixty-nine illustrations. Pp. 248. 8s. Macmillan & Co., Ltd., St. Martin's Street, London, W.C.2. So comprehensively does this book deal with the routine laboratory practice required of an intermediate or advanced school student of chemistry that it would be extremely difficult to find an intermediate chemistry syllabus for which it does not cater. The various methods of volumetric analysis, exercises in the preparation of organic substances and a complete scheme of inorganic analysis are presented with sufficient attention to theoretical considerations. The section on organic preparations is prefaced with notes on the use of apparatus, e.g., the boring of corks and the fitting of glass connections. In addition, there are two chapters on physico-chemical measurements. The book is completed by an appendix giving methods of preparation for common qualitative and quantitative laboratory agents, a table of atomic weights, tables of logarithms and antilogarithms and a complete index.

**Keep off the Grass.**—Noel Godber. 7½ x 4½ in. Pp. 224. 9s. 6d. John Long, Ltd., London. Escapist literature commonly appears in lurid bookjackets, but this extravagant farce surely deserves a less vulgar cover. Among its many threads is a tussle between rival manufacturers of proprietary hair preparations. Pulverton, the "leading manufacturer" of proprietary medicines, a public benefactor who "cuts his profits to the lowest possible limits," launches a capsule that purports to restore hair by enriching the blood. The product, heavily advertised, has an instant success, soon to be deflated by a whispering campaign organised on behalf of the rival manufacturer. However, Pulverton at last is able to send off "a wireless message that was to mark another epoch in the vending of proprietary medicines," so everybody is happy except any reader who looks for a realist picture of the drug trade.

## TRADE MARKS

### From the "Trade Marks Journal," October 17

*For bandages (5).*

SURGITUBE, 697,000, by Surgitube International, Inc., New York. TUBGAUZ, B698,284, by the Scholl Manufacturing Co., Ltd., London, E.C.1.

*For medicated pastilles for ailments of the throat and chest (5).*

VALDA PASTILLES, 700,222, by Pastilval, Ltd., London, N.1.

*For deodorant pads for human use (5).*

DEROMAS, 700,658, by T. K. Products, Ltd., Glasgow.

*For pharmaceutical preparations (5).*

AMBODRYL, 700,794, by Parke, Davis & Co., Detroit. CARDELLIN, 701,139, by Therapeutic Products, Ltd., Greenford.

*For disinfectants for the drinking water of birds and poultry (5).*

NATOLYX, 700,797, by Haco-Argento N.V. Maastricht.

*For medicinal preparations for the treatment of coughs and colds (5).*

JEELING, 701,134, by Potter & Clarke, Ltd., London, W.1.

*For denture-cleansing preparations (3).*

BRITADENT, B700,148, by Jemmie Harold Jenkins, and Robert Cecil Francis Vizor, Cheltenham.

### From the "Trade Marks Journal," October 24

*For industrial scientific, agricultural and horticultural chemicals (1).*

MONSANTO, 683,170, by Monsanto Chemicals, Ltd., London, S.W.1.

*For industrial, scientific and photographic chemicals (1).*

CAWO, 694,890, by Dr. Udo Weidner & Wolf von der Osten Kommanditgesellschaft, Oberbayern.

*For chemical products for use in manufacture of perfumery, soaps and cosmetics (1).*

AROMOPHOR, INVARIA, IRETHON, POLY-ONE, 700,287-322, by Firmenich & Cie, Geneva.

*For non-medicinal preparations for the hair (3).*

LOXENE, 700,508, by Maureen Baun, Ltd., Bury.

*For toilet soap (3).*

JACOBITE, 701,101, by James Mellis & Co., Prestonpans.

*For pharmaceutical, veterinary and sanitary substances, disinfectants (5).*

MONSANTO, 683,173, by Monsanto Chemicals, Ltd., London, S.W.1.

*For all goods (5).*

QUOTANE, LEVEDRINE, 699,085-086, by Smith, Kline & French, International Co., Pennsylvania. REDICYTE, 700,459, by Sharp & Dohme, Ltd., Hoddesdon. BOGONE, 700,988, by Donald Weston Jarvis, London, S.W.15.

*For all goods, excluding dietetic, infants' and invalids' foods (5).*

ZUBE, 701,030, by F. W. Hampshire & Co., Ltd., Derby.

*For insecticides (5).*

ANTEX, 701,050, by Produx Industries, Luton.

*For veterinary preparations (5).*

HISTOTURK, 701,446, by Cooper, McDougall & Robertson, Ltd., Berkhamstead.

*For surgical instruments and apparatus and surgical hosiery (10).*

FRICOSE, 699,365, by F. E. Fricker, Ltd. Bradford.

*For elastic anklets, socks, stockings and belts surgical or curative purposes (10).*

ACENET, 700,518, by George Libin and Le Tcherniak.

## PRINT AND PUBLICITY

**Sponsored Broadcasts.**—Bovril, Ltd., 152 C Street, London, E.C., have booked a series of broadcasts from Radio Luxembourg by Mr. J. Priestley.

**Toilet Tissue Display Piece.**—G. Havinden,

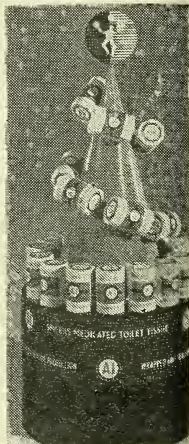
G. Havinden, Ltd., Havinden House, 71 Baker Street, London, W.1, are lending to selected stores and retailers a floor display stand 4 ft. high with cylindrical base 21 in. in diameter for displaying Spicers A1 toilet rolls. The central cone is of perforated metal.

**New Price Lists.**—

Thomas Tyrer & Co., Ltd., Stirling Chemical Works, Canning Road, Stratford, London, E.15, have issued a revised loose-leaf price list for insertion into old covers.—Butler & Crispe, Ltd., 80 Clerkenwell Road, London, E.C.1, have issued a 20-p. catalogue of "Suggestions Christmas," listing goods suitable for sale chemists.

**Chemicals From Oil.**—Petrocarbon, Ltd., Piccadilly, London, W.1, have issued a 16-p. booklet, "Petrocarbon Services," giving a brief outline of the world-wide services which they offer and which include the designing, developing, engineering and building of plants for the production of chemicals from oil and other raw materials.

**Major Press Campaigns.**—Rimmel Distribute Ltd., 70 Park Lane, London, W.1, are launching a large-scale advertising campaign for their Christmas lines. A colour brochure illustrating the will be issued soon.—Jean Sorelle, Ltd., 22 Tudor Road, London, N.4, are commencing a national advertising campaign for the Christmas trade November.



Every day the 'NERVONE' message goes out to customers in your area!



(NEW PACK)

CONSISTENT advertising has created a lively demand for 'NERVONE' the new biochemic formula. An intensive Press and screen campaign will further increase the demand for this fine preparation. More and more of your customers will ask for 'NERVONE' and experience has shown that 'repeats' and recommendations flow freely from initial orders. It will pay you to stock and display 'NERVONE'!

**ONE SHILLING AND SEVENPENCE  
PROFIT ON EACH SALE!**

'NERVONE' CECIL HOUSE, HOLBORN VIADUCT, LONDON



*Known and respected  
throughout the world for more  
than forty years*

It is a source of pride to us to know that Eclipsol products have been known and respected in an ever widening circle throughout the world, since we commenced manufacturing this range more than forty years ago.

Your confidence and the recommendation of satisfied users has resulted in a steady and ever increasing demand for Eclipsol.

The standard of quality of Eclipsol never varies—only the best—the very best is good enough to bear the name Eclipsol.

Every one of the Eclipsol lines will always—without fail—do whatever is claimed for it.

May we send you full particulars of the complete Eclipsol range?

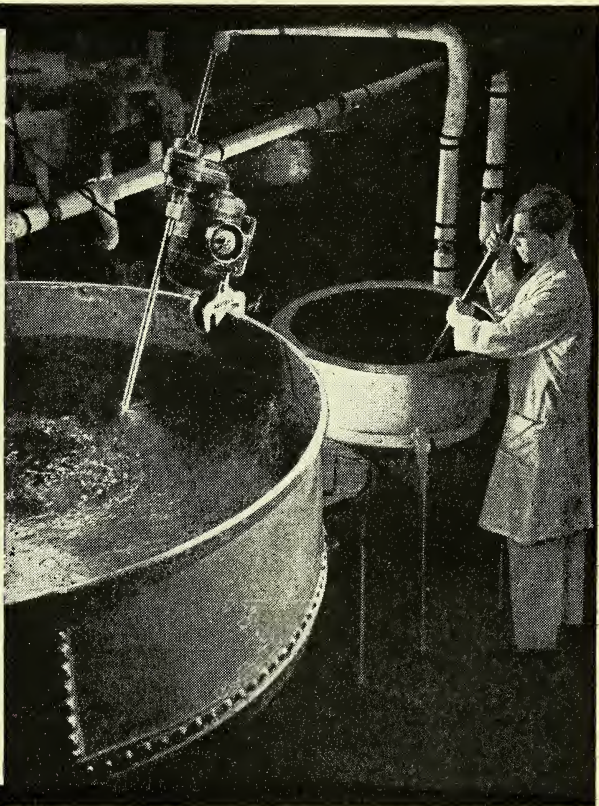
*Manufactured  
by*  
**C. A. STOKES & CO. LTD.,**  
**BRISTOL GLOUCESTERSHIRE**

# EVANS

*make a contribution to*

## The Treatment of Asthenia

*Bulk manufacturing process*



ull and rapid recovery from illness following surgical operations may be the more readily achieved if liver extract, iron and vitamins are supplied to the patient to facilitate blood regeneration. Even a relatively small fall in the hæmoglobin level in patients otherwise reasonably healthy may manifest itself in the form of general asthenia and oneness to fatigue. HEPRONA, a preparation containing Hepatex

liver extract, iron, members of the Vitamin B complex and glycerophosphates, is an excellent tonic in such cases and is suitable both for adults and children.

# HEPRONA

TRADE MARK

*Further information on request from:*  
Medical Information Dept., Speke, Liverpool 19  
or 50 Bartholomew Close, London, EC1

**EVANS MEDICAL SUPPLIES LTD**

OVERSEAS COMPANIES & BRANCHES: AUSTRALIA, BRAZIL, EIRE, INDIA, PAKISTAN, SOUTH AFRICA; SOUTH EAST ASIA

IN MATTERS CONCERNING FEMININE HYGIENE..

**SHE LOOKS TO**  
*you* **FOR**  
**PROFESSIONAL ADVICE**



The responsibility to give professional advice when called upon has placed pharmacy in a position of high esteem and it is a service especially valued by women. When it is a question of family limitation it is always wise to suggest a Rendell's Product. As pioneers of the chemical contraceptive we can now offer a range of preparations to suit every individual requirement

**RENDELL PESSARIES**

**RENDELL GELS**

**RENDELL-FOAM**

**RENDELL-CREAM**

*Rendell's*

PRODUCTS FOR FEMININE HYGIENE

**W. J. RENDELL LTD., ICKLEFORD MANOR, HITCHIN, HERTS**

# INDEX TO ADVERTISERS

ddis, Ltd. ....	xxi	Distillers Co., Ltd. ....	xxviii
llen & Hanburys, Ltd. ....	Front Cover	Dixor, Ltd. ....	30
ltra, Ltd. ....	Leader Page	Duncan, Flockhart & Co., Ltd. ....	x
evin Electric, Ltd. ....	14	Dunlop Rubber Co., Ltd. ....	xxv
epro, Ltd. ....	xxiii		
yrton, Saunders & Co., Ltd. ....	ix	Eade's Pills, Ltd. ....	xxiv
		Edme, Ltd. ....	xxvi
aily, R., & Son, Ltd. ....	viii	Evans Medical Supplies, Ltd. ....	3
un, Maureen, Ltd. ....	15	Evan Williams Co., Ltd. ....	5
o-Colloids, Ltd. ....	xxviii		
ometica, Ltd. ....	xxii	F.A.I.R. Laboratories, Ltd. ....	xxxiii
orex Laboratories, Ltd. ....	xx	Famel Cough Syrup ....	12
akey's Food Co., Ltd. ....	xx	Fassett & Johnson (Ireland), Ltd. ....	xxvii
urjois, Ltd. ....	10, 11	Freudentheil, Smith & Co. ....	Leader Page
ritish Drug Houses, Ltd., The ....	9		
ritish Dyewood Co., Ltd., The ....	ii	Gardiner & Co. (The Scotch House), Ltd. ...	xxx
onnley, H., & Co., Ltd. ....	7	Genatosan, Ltd. ....	xiv
umleu, Wm. Chas. ....	iii	Greyer, Brecheisen & Co., Ltd. ....	ii
urgoyne, Burbidges & Co., Ltd. ....	i	Guest, Thos., & Co., Ltd. ....	34
urroughs, James, Ltd. ....	Leader Page		
urroughs Wellcome & Co. ....	35	Halex, Ltd. ....	32
utler & Crispe, Ltd. ....	25	Harley, T., Ltd. ....	ii
		Harris, Hart & Co., Ltd. ....	iii
anisters, Ltd. ....	vi	Herts Pharmaceuticals, Ltd. ....	27
err's Cereal Products, Ltd. ....	xxii	Huffer & Smith, Ltd. ....	xxix
ba Laboratories, Ltd. ....	36		
ompressed Paper Packing, Ltd. ....	25	Imperial Chemical Industries, Ltd. ....	v
ontainer Recovery Service ....	xvii	Industrial Tapes, Ltd. ....	vi
ontinental Laboratories, Ltd. ....	xx	International Chemical Co., Ltd. ....	xxxiv
ox, Alfred (Surgical), Ltd. ....	xxviii		
ox, Arthur H., & Co., Ltd. ....	Cover iv	Jeffreys, Miller & Co., Ltd. ....	xxviii
issons, Sons & Co., Ltd. ....	Cover iii	Jeyes Sanitary Compound Co., Ltd. ....	xiii
aticura Preparations ....	xix		
aniel, Richard, & Son, Ltd. ....	13		
emuth, R., Ltd. ....	8		

(continued overleaf)

## "I want an Evan Williams TONING PACK please"

You'll have more and more customers saying this, for women do talk amongst themselves and are enthusiastic about the marvellous hair brightening qualities of these Toning Packs.

Recommendations are boosting sales. Are you well supplied with this profitable, nationally advertised and fast moving line? If not, book your orders now.



## Evan Williams TONING PACKS

In Packets (with Shampoo)  
retailing at 2/- incl. tax  
4oz. tins (full application)  
retailing at 3/9 incl. tax

**Graduated Henna TONING PACK** for Auburn,  
Chestnut and all shades of Brown Hair  
**Blended Camomile TONING PACK** for Fair Hair  
*The Perfect Hair Brighteners and Conditioners*

**EVAN WILLIAMS CO. LTD.,** Sales Dept., Aintree Road, Perivale, Middlesex

**INDEX (Contd.)**

Jones Wm. A., Ltd. ....	Leader Page
Kellys, John (London), Ltd. ....	34
Kemsales, Ltd. ....	viii
Lastonet Products, Ltd. ....	xxix
Leda Chemicals, Ltd. ....	xxviii
MacAndrews & Forbes, Ltd. ....	vi
Macdonald & Son, Ltd. ....	16
Manesty Machines, Ltd. ....	31
Marchon Products, Ltd. ....	xviii
Matthews & Wilson, Ltd. ....	xxiv
Matthews, S., & Co., Ltd. ....	viii
Maw, S., Son & Sons, Ltd. ....	23
May & Baker, Ltd. ....	22
Menley & James, Ltd. ....	33
Merica, M., & Co., Ltd. ....	vi
Middleton & Co., Ltd. ....	xxii
Moir Box Co. ....	Col. Supp.
Monsanto Chemicals, Limited ....	20, 21
Morrison & Ralph, Ltd. ....	x
Musterole Fine Products, Ltd. ....	xix
Nagales (Elegan Hairnets) ....	xii
Napp, H. R., Ltd. ....	17
Nervone ....	1
Nestlé C., & Co., Ltd. ....	7
Nestlé & Co. ....	28
Oatine Co. ....	xxiv
Or-Lem, Ltd. ....	xxviii
Orridge & Co. ....	Col. Supp.
Parke, Davis & Co. ....	Cover ii
Parkinsons, Ltd. ....	iv
Payne, P. P., & Sons, Ltd. ....	xv
Pharmax, Ltd. ....	x
Potter & Clark, Ltd. ....	x
Prince Regent Tar Co., Ltd. ....	x
Progress Shaving Brush Co., Ltd. ....	x
Radiol Chemicals, Ltd. ....	x
Ransom Bros. & Sons ....	Leader P
Ransom, Wm., & Son, Ltd. ....	x
Rendell, W. J., Ltd. ....	xx
Reval, A., & Co., Ltd. ....	xx
Riddell Products, Ltd. ....	xx
Ronaldson, J., & Co., Ltd. ....	xx
Shadeine Co. ....	x
Sharp & Dohme, Ltd. ....	x
Sherley, A. F. & Co., Ltd. ....	x
Simmonds-Low Horticultural Products, Ltd. ....	x
Solprin ....	x
Stewart, Goodall & Dunlop, Ltd. ....	x
Stokes, G. A., & Co., Ltd. ....	x
Storey, William, & Co., Ltd. ....	Leader P
Sturge, John & E., Ltd. ....	x
Surgical Hosiery Co., Ltd. ....	x
Tampax, Ltd. ....	x
Taylor, Edward, Ltd. ....	x
Teasdale & Co., Ltd. ....	Leader P
Tell Products, Ltd. ....	Col. Su
Thornton & Ross, Ltd. ....	x
Tunnel Glucose Refineries ....	x
Vitamins, Ltd. ....	x
Waide, Thos., & Sons, Ltd. ....	x
Wallis Laboratory, Ltd., The ....	Leader P
Wander, A., Ltd. ....	x
Whiffen & Sons, Ltd. ....	x
Wilcox, Jozeau & Co., Ltd. ....	Leader P
Wilson & Mansfield, Ltd. ....	x

**FOR BULK SUPPLIES OF**

# ***Disinfectants***

**BLACK AND WHITE FLUIDS APPROVED FOR USE  
UNDER THE DISEASES of ANIMALS ACT, ETC.**

## ***& Pine Fluids***

**DISINFECTANTS AND DEODORANTS—ALL TYPES  
PACKED IN 1, 5, 10 and 40 gallon drums.****PRINCE REGENT TAR COMPANY LTD.****(Managers: BURT, BOULTON & HAYWOOD LTD)****BRETENHAM HOUSE, LANCASTER PLACE, LONDON, W.C.2****Telephone: Temple Bar 5801 (8 lines)****Telegrams: "Burboul, Rand, London"**

# The Bronnley Beauty BULLETIN

A Regular Feature for the Discriminating Chemist



## VERSATILE BRONNLEY



The above heading is the theme of our Press advertising campaign for November and December. Reference is made to *Bronnley for the Beauty Bath* (Beauty Soap in gift boxes and bathroom toiletries in matching fragrances); *Bronnley for Men of Discernment* (our recently introduced distinctive series); and *Bronnley for a Beautiful Baby*.

It will pay to ensure that you are holding complete stocks of these three excellent series—fully illustrated in our current price list.

## SHAVING SOAP

Without using superlatives to describe our products, we are justified in referring to recent comments, which indicate that Bronnley's Shaving Soaps are the world's finest.

Production is greatly improved in our rebuilt factory and we now offer Shaving Soap in wooden bowls (retail 7s. 6d. with refills 4s. 6d.); Viotto Shaving Soap in plastic bowl 5s. 6d., refill 3s. 3d. and English Fern Chubby Shaving Stick 5s. 6d., refill 3s. 3d. Kindly indicate your requirements.



## CO-OPERATIVE ADVERTISING



We are always pleased to discuss co-operative advertising in the local Press. Many of our leading stockists have already made profitable use of the attractive advertisement blocks which we can make available. Let us know if you are interested.

## CONCLUSION FOR THE MONTH

'Service above self.'

Motto of Rotary International.



By Appointment  
Toilet Soap Makers  
to H.M. King George VI  
H. Bronnley & Co. Ltd.

By188

Announcement to

# WHOLESALE

We would like to inform the Trade that, as from 1st November of this year, orders for :

**NESTOL ALURA COLOUR  
CREME D'ELITE WAVE SET  
SACHETS, SOLUTIONS, ETC.**

which are at present being placed through Dendron Distributors Ltd. should be sent direct to :

**C. NESTLÉ & CO., LTD.**  
NESTLECOMBE HOUSE  
BRANSCOMBE, near SEATON, DEVON

Consistent  
advertising  
and sampling over  
the past six months  
will create a demand for the  
special Christmas packs of

# perfume by DEMUTH

*Have you been asked for*

WHITE LIES



MEMENTO



*or*

SAGA



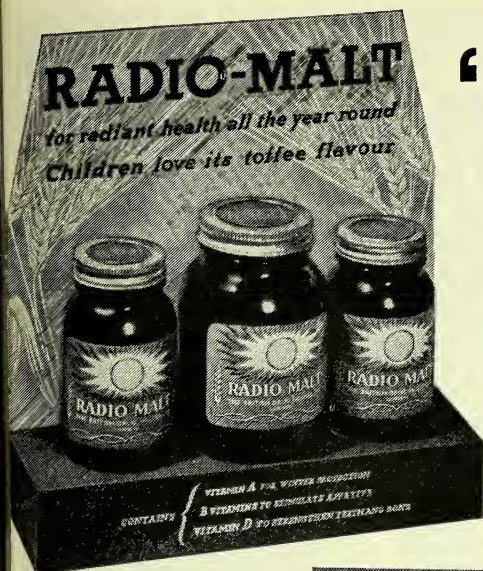
CONTRABAND



*you will —*

see that you have stocks of these  
Christmas packs in time for the coming gift rush.

Boudoir size at 7/6d. inc. tax in charming  
be-ribboned bells, each in individual gift cartons.  
Handbag size at 3/1d. inc. tax tied with Festive  
cord with gift tally attached. Also  
Frozoelone and Frozolavender in  
individual gift cartons at 4/3d. inc. tax.  
*Show material now available.*



# 'RADIO-MALT'

for radiant health

The phrase your customers  
will remember



These new display pieces—a folding display stand, a winged display screen and crownets for 1 lb. and 2 lb. jars—are available to remind customers of Radio-Malt's standardised vitamin content and its pleasant toffee flavour. Write to B.D.H. or ask your B.D.H. representative for details of bonus terms on quantity purchases of Radio-Malt.

THE BRITISH DRUG HOUSES LTD. LONDON N.1

*Something NEW—*  
*Something DIFFERENT*  
to boost *YOUR* Christmas sales



*Evening in Paris*  
"Champagne Bucket"  
Novelty

ORDER NOW FOR IMMEDIATE DELIVERY





## DON'T GO AWAY MAD!

We realise that this is very short notice indeed.

We appreciate that you will have placed the bulk of your Christmas orders by now.

But, as a matter of fact, we honestly hadn't expected that this new novelty line would be ready in time for the Christmas trade. Then, just the other day, we learned that it would be — if we moved fast!

We think you'll agree that this novelty is too good to hold back. We think you'll want to stock it for the Christmas trade, even at this late date. We're *sure* your customers will like it, want it, *buy* it!

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★		★
★	<b>TRADE PRICE . . . 24/- per dozen (plus 100% P.T.)</b>	★
★	Each strawboard container holds a dozen "Champagne Bucket" novelties, each in its own attractive carton.	★
★	<b>RETAIL PRICE . . . 5/- each (incl. 100% P.T.)</b>	★
★	<b>IMPORTANT:</b> No carriage charge on orders of £2 or more, on this line or on any combination of Bourjois products.	★
★		★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★		

# BOURJOIS

Order from:

BOURJOIS LTD., QUEEN'S WAY, CROYDON, SURREY

*A New size in*

**FAMEL**

***and it's 'tailor-made' for bigger sales!***

There's a *new* Family size in Famel now—a 20 oz. bottle—and it's a certain seller with every customer who likes to save money by investing in a larger size. And *what* a saving! With the new Family size your customer gets the equivalent of 5 small bottles for the price of 3!

This new size will be popular too with the rapidly growing number of people who 'lay in' Famel for the winter, so that it is ready for instant use to *forestall* and ward off coughs and colds. And here's a good selling point for customers—*Famel does not deteriorate with keeping.*

At 7s. 6d. (including P.T.) the new Family Famel is such obviously good value that it will pay you to stock up *now* to meet winter demand. Trade price is 54s. 0d. plus P.T. 18s. 0d. per dozen. When ordering, don't forget that really excellent second string—*Famel Throat Pastilles. They have the authentic Famel quality!*

PLEASE NOTE THAT THE 32 OZ. FAMILY  
SIZE IS NOW DISCONTINUED

**FAMEL COUGH SYRUP**

KELDON LTD • PERIVALE • MIDDLESEX

**FOR CHEMISTS****DRUGS****SUNDRIES**

*Manufacturing Chemists*

**PILLS • TABLETS  
PROPRIETARIES**

HEAD OFFICE & WORKS: MANSFIELD ROAD, DERBY. Tel: 48266 (4 lines)

BRANCH WAREHOUSE: GROSVENOR ST., ASHTON under LYNE. Tel: 2816 (3 lines)



*Chemists' Labels*  
by

**THOMAS WAIDE & SONS LTD**  
KIRKSTALL HILL LEEDS

☆ it's new!  
 ☆ it's intriguing!



IT'S THE

# ARVIN *Wind-a-Pak*

One more example of Arvin leadership . . . the Wind-A-Pak. This ingenious new container which combines beauty with utility, is available only with the **ARVIN 'DE LUXE' ELECTRIC DRY SHAVER**. Together, they look intriguing in the window, and are ideal for counter display. The Wind-A-Pak is going to make many new friends for this Arvin electric dry shaver. Like its sister model 'Consort', the 'De Luxe' has the outstanding Slim-Twin head feature. Both are popularly priced. 'Consort' 59/6 (AC only), 'De Luxe' £4.16.1d. (AC/DC), Tax paid.



# ARVIN

## ELECTRIC LIMITED

Fernbrook Avenue, Southend-on-Sea

# IMPORTANT NEWS

from

## F.W. Hampshire & Co. Ltd.

---

*We are pleased to announce  
that we have now taken over the business of  
Maureen Baun Ltd. Bury, Lancashire  
manufacturers of*

### LORELOX

**Hair Styling Lotion**

### Toddilox

**Children's Hair Curling Preparation**

**NOW APPEARING —**

*Very extensive advertising in nearly all  
big circulation National Newspapers and Magazines*

**NOW SHOWING —**

*"A Smart Set," the new Lorelox Technicolor filmlet, at principal Odeon, Gaumont  
and Independent cinemas throughout the country*

---

*Please make a note — when it's 'Lorelox' or 'Toddilox' write to:*

**F. W. HAMPSHIRE & Co. LTD, SUNNYDALE, DERBY**

***She's COMFORTABLE!***



*Indeed, she's VERY comfortable  
She uses Silcot cotton wool towels*

**SILCOT** *Sanitary Towels*

*Our Showcards and  
National Advertising  
Help to*

**KEEP  
SALES  
MOVING!**

Keep sales moving! This is the problem of every retailer. And this is the problem in which he is being assisted by Silcot advertising and publicity.

Every month a fresh, striking advertisement in the leading magazines. Every month a fresh, attractive showcard, matching the advertisement, for his window or counter.

All this, added to a first-class selling line, helps to keep sales moving.



*She's  
COMFORTABLE!*

Indeed, she's very comfortable! And her comfort is due to the fact that she always uses Silcot... the cotton-wool towel with stitched loops.

**SILCOT**  
SANITARY TOWELS

**SILCOT**

*Sanitary Towels*

**FOR COMFORT AND PROFIT**

MACDONALD & SON LTD., HOPE MILLS, POLLARD STREET, MANCHESTER  
ARDWICK 1561

A selection  
from the range of



## ETHICAL PRODUCTS

all supported by intensive  
medical propaganda and  
in steady demand

### **'ABECEDIN'**

Vitamins A.B.C.D. (Tablets and Emulsion)

### **'CAAPI'**

Anti-Coryza Tablets

### **'DYSASTOL'**

for Dysmenorrhœa

### **'MINACEDIN'**

Vitamins A.B.C.D. with Minerals

### **'RAMINAL'**

for Hyperpiesis

### **'SEDONAN'**

for Otitis Media

### **'SOROSIL'**

Dermal Ointment

**R. NAPP Limited, 3 & 4, Clements Inn, London, W.C.2.**

# Why you should Sell

## WANDER

BRAND

### MALT & COD LIVER OIL



**B**ECAUSE of its unsurpassed quality and its ready acceptance by the public, Wander Brand Malt Extract and Cod Liver Oil is a product which the pharmacist can recommend with full confidence, and in his own best interests. Wander Brand Malt Extract and Cod Liver Oil is outstanding in its field and its pharmaceutical excellence is recognized by physicians. The Cod Liver Oil used is the best obtainable and the Malt Extract is specially prepared by A. Wander Ltd. who are leading authorities on its manufacture.

With its attractive appearance and toffee-like flavour, Wander Brand Malt Extract and Cod Liver Oil is thoroughly enjoyed by children and adults.

*On the P.A.T.A.*

<i>Trade Prices :—</i>	1 doz.	3 doz.	6 doz.	12 doz.
1 lb. jars	22/9	22/6	22/3	22/-
2 lb. jars	43/-	42/6	42/-	41/6

*Exempt from Purchase Tax*

3, 6 or 12 doz.: 1 lb. jars or the equivalent.

*Retail Prices :—* 1 lb. jars 2/6; 2 lb. jars 4/9

**NOTE—**Also supplied if required with attractive labels bearing your own name, at competitive prices. Attractive showcards available.

*For further details write to :*

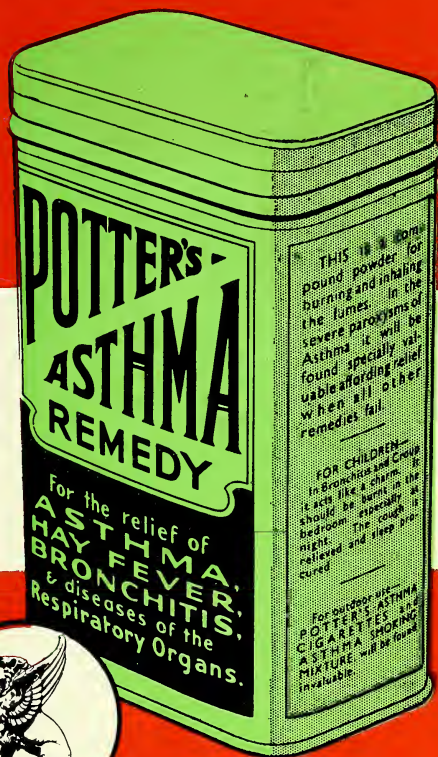
**A. WANDER LTD.**

42 UPPER GROSVENOR STREET,  
GROSVENOR SQUARE,  
LONDON W.1.

# A BIG *Selling Line*

NATIONALLY  
ADVERTISED P.A.T.A.  
RETAIL 2/9 including P.T.  
20/- doz. (P.T. 6/8 doz.)

SHOWCARDS WITH ALL ORDERS



## POTTER & CLARKE LTD

60-64 ARTILLERY LANE, LONDON, E.1

Phone: BISHOPSGATE 4761.

Grams: Horehound, "Phone, London.

77 DANTZIC STREET, MANCHESTER, 4

Phone: BLACKFRIARS 8734.

Grams: Horehound, Manchester.

62 ORBISTON STREET, MOTHERWELL

Phone: MOTHERWELL 1413.

Grams: Horehound, Motherwell.

# AN IMPORTANT LIST OF PHARMACEUTICALS

ASPIRGRAN  
ACETYL SALICYLIC ACID B.P.  
SALICYLIC ACID B.P.  
SALICYLIC ACID (Technical)  
METHYL SALICYLATE B.P.  
SODIUM SALICYLATE B.P.  
BENZOIC ACID B.P.  
SODIUM BENZOATE B.P.  
PHENACETIN B.P.  
PHENOL B.P.  
PCMX  
PCMC  
PHENOLPHTHALEIN B.P.  
CRESANTOL 3  
CRESANTOL 15

In the long ago days when the production of fine chemicals in this country was on a very limited scale, the price of phenacetin rose to 110/-d. per lb. and aspirin to 50/-d. per lb. This has not happened again.

Monsanto were prominent in the establishment of a British fine chemical industry after the first world war. They made phenacetin—and they remain the sole manufacturers in this country. They made aspirin—and they still make the bulk of the nation's production. They made methyl salicylate—and they are still the largest producers of a pharmaceutical the demand for which has greatly increased in recent years. They are potentially the largest producers of sodium salicylate. And they also make an important range of germicides and a number of associated products.

After thirty years of development, the list of basic fine chemicals is very important. Monsanto make these vital pharmaceuticals, they make them to the highest possible standards of purity, they make them in extremely large quantities, and they are always setting their sights a little higher.





CH 3271

## Concerning PEOPLE

### M&B Pharmaceutical Chemicals include

Barbiturates  
Bismuth Salts  
Bromides  
Caffeine & Salts  
Chloroform  
Citrates  
Cocaine & Salts  
Ephedrine  
Ether  
Iodides  
Opiates  
Theobromine & Salts

**B.P.** Behind the production of the British Pharmacopœia lie the experience and abilities of the foremost authorities in those branches of therapeutic and pharmaceutical knowledge with which the publication is primarily concerned.

**M&B** Behind the production of M&B Pharmaceutical Chemicals lies an organization in which highly trained chemists and research workers co-operate with skilled craftsmen to produce materials which conform in every respect to the standards laid down by the B.P.

*Available from Wholesalers throughout the country*

**MAY & BAKER LTD DAGENHAM**

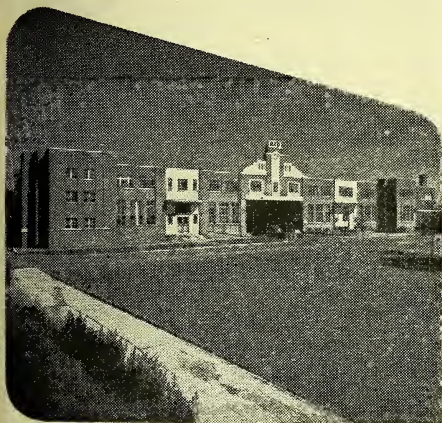
TELEPHONE: ILFORD 3060

EXTENSION 220

*Associated Houses in Sydney, Bombay, Port Elizabeth, Montreal, Wellington & Lagos. Branches & Agents throughout the world*

# *chemists only...*

NOW IN OUR 144th YEAR OF TRADING, IT IS OUR POLICY AT MAW OF BARNET TO MARKET PRODUCTS ONLY THROUGH CHEMISTS.



Our advertising is being increased and we now have advertisements appearing at frequent and regular intervals in the National Press and Women's Magazines for :—

**VELFIN SANITARY TOWELS.  
MAW'S TEATS  
AND  
MAW'S FEEDING BOTTLES.**

Every advertisement carries the message  
" *Chemists Only* "

At Barnet we have our Head Office, Factory, Warehouse and Laboratory where we will always make you welcome should you wish to pay us a visit.

At our London Showroom, 67, Jermyn Street, (near St. James's St.) we have on display a wide variety of Merchandise and Shop Fittings for your inspection and our staff will welcome the opportunity of showing you round between the hours of 9 a.m. and 5.30 p.m. any weekday or by arrangement on Saturday mornings.

From 9 a.m. to 4.30 p.m. at the same address our Surgical Fitting Rooms are open for the convenience of your customers both male and female. To avoid any unnecessary waiting, it is always advisable to arrange for an appointment. Phone: Whitehall 5255.



# *...chemists only*

## **S. MAW SON & SONS LTD.**

**ALDRSGATE HOUSE, CROMER ROAD, NEW BARNET, HERTS.**

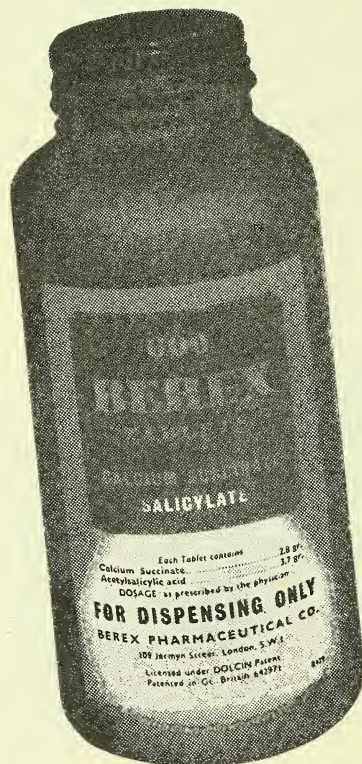
PHONE: BARNET 5555

# BEREX

REG. TRADE MARK

## CALCIUM SUCCINATE-SALICYLATE TABLETS

*Licensed under DOLCIN Patent. Patented in Great Britain 642971*



The Medical Profession has acknowledged the value of Calcium Succinate - Salicylate Therapy in the relief of painful symptoms associated with all the rheumatic disorders. Now this effective treatment is available in the form of Berex. Berex is not advertised to the public and is intended for use by prescription.

*Berex is  
prescribable  
on Form E.C.10*

### PRICES

TRADE		RETAIL
100's :	43/6 plus 14/6 P.T. PER DOZ.	6/- INC. P.T.
600's :	225/- plus 75/- P.T. PER DOZ.	31/3 INC. P.T.

ORDER FROM YOUR WHOLESALER

DISTRIBUTORS : TAMPAX LTD., 110 JERMYN STREET, LONDON, S.W.1

We Stock  
**Prescriptive Pharmaceuticals**  
 for the  
National Health Service  
 by  
 all the Leading Makers.  
*Prompt Dispatch by Motor,  
 Rail or Post.*

Proprietary  
Medicines.

Chemists'  
Sundries.

Surgical  
Dressings.

Toilet  
Goods.

*Send your Orders or Enquiries to~*

**BUTLER & CRISPE, LTD.**

ESTABLISHED 1777.

80-84, Clerkenwell Road,  
LONDON, E.C.1.

TELEPHONE:  
CLERKENWELL 3060

TELEGRAMS:  
ALLUWANT, SMITH, LONDON.

**CORK LINED SLEEVES**

**"SAFETIPAK"**

THE MOULDED BOTTLE PACKING

ALL SIZES

IMMEDIATE DELIVERY

CORRUGATED PULL THROUGH TYPE BOXES

**Compressed Paper Packing Limited**

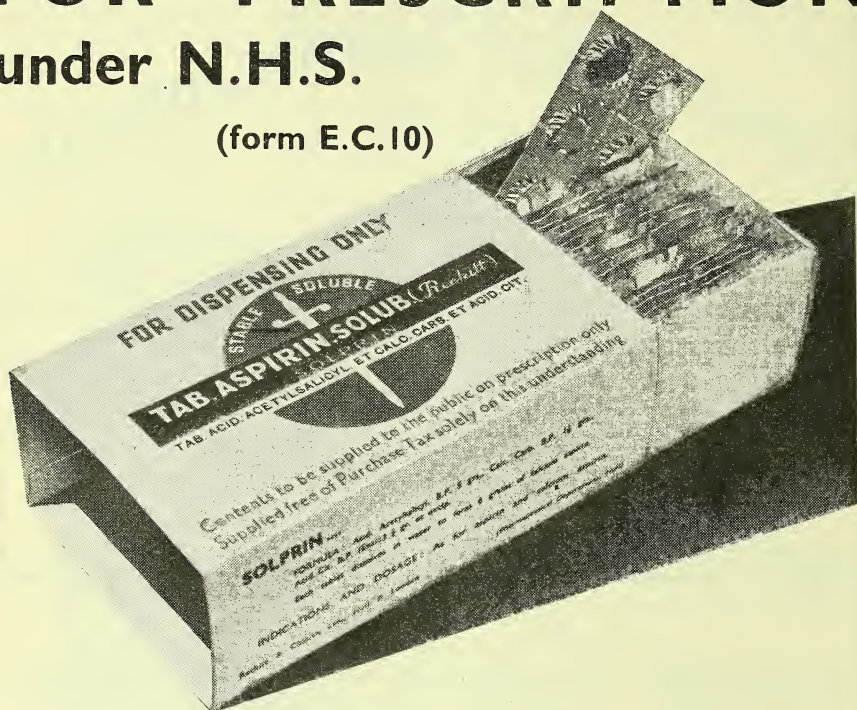
Horton Road - West Drayton - Middlesex

Telephone: WEST DRAYTON 2237

# FOR PRESCRIPTION

## under N.H.S.

(form E.C.10)



RECKITT & COLMAN LIMITED announce the introduction of 'Solprin', a soluble aspirin for the dispensing of prescriptions. Solprin is not advertised to the public.

The problem of prescribing calcium aspirin free from decomposition products is solved. Solprin, a stable preparation in tablet form, combines the

convenience of aspirin tablets with the therapeutic advantages of pure calcium aspirin. Its analgesic, sedative and anti-rheumatic properties, and the fact that even in large amounts it is unlikely to produce gastric disturbances, have been confirmed over a period in clinical trials carried out in leading hospitals.

**The SOLPRIN prescription pack** contains 300 tablets, air sealed in foils of 6. Price 7/- per box (free of P.T.)

AVAILABLE IN THE U.K. AND NORTHERN IRELAND ONLY

What the gayest Christmas trees will be wearing



# NIVEA'S 1951 FESTIVE WRAPPER!



What better present can you sell for Christmas tree or stocking than popular Nivea Creme in its gay and colourful wrapper? Announcements in the national magazines are creating a family demand for this attractive little gift.

Make sure you have supplies to meet it. Orders for the 2/6d. size now being despatched are already dressed for the party. Wrappers are also supplied separately and are very easily slipped over existing stocks (2/6d. size).

## SELL NIVEA FOR THE FAMILY CHRISTMAS TREE

HERTS PHARMACEUTICALS LTD., WELWYN GARDEN CITY, HERTS.

GNT 128





*“Soothe sore throats in  
a matter of seconds”*

# DIXOR *Velouty* FOUNDATION CREAM

## BEAUTY PREPARATIONS

DIXOR EXTENDS THE  
RANGE OF VELOUTY PRODUCTS

with Velouty Foundation Cream, Velouty Skin Food and Velouty Cleansing Cream. When you next order Velouty de Dixor Powder Cream include these new preparations. Display them side by side and create sales. Each preparation performs a special task in the art of achieving complexion beauty.

Ideal for use as a powder base, and make-up foundation. Soothes the skin when chafed and prevents roughness. Tubes only. One dozen in attractive display carton.

TRADE 9/6d. doz.  
RETAIL 2/- each.



# *Velouty* de DIXOR

## The ORIGINAL combined POWDER CREAM

A modern cosmetic, giving the skin a natural rose-petal elegance. Presented in five delightful shades, for all the year round—day or night—make-up. Tubes packed in attractive display outers of one dozen, and jars in display outers of half-dozen.

Shades :- PEACH  
IVORY OCHRE  
NATURAL SUNGOLD



TUBES

	POTS	No. 2	No. 3
TRADE	12/- doz.	5/2 doz.	9/6 doz.
RETAIL	2/6 each	1/1 each	2/- each

# *Velouty* SKIN FOOD

Restores any deficiency of natural oils, keeping the skin supple and free from blemishes, wrinkles and rough and dry patches. Tubes only. One dozen in attractive display carton.

TRADE  
9/6d. doz.  
RETAIL 2/- each



# *Velouty* CLEANSING CREAM

Provides the most effective way of removing old make-up. Particularly suitable for skins that tend to dryness. Tubes only. One dozen in attractive display carton.

TRADE 9/6d. doz.  
RETAIL 2/- each.



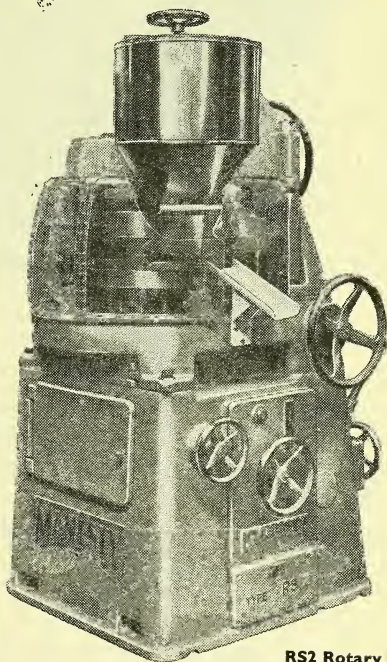
# DIXOR LTD.

ST. LEONARD'S WORKS, MORTLAKE, S.W. 14.

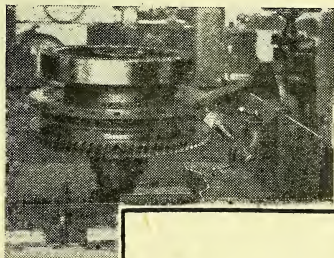
# MANESTY

*means precision-built*

Leading tablet makers throughout the World have long recognised that the name MANESTY on tablet preparation and compressing machinery is an assurance of all that can be desired in accuracy of construction and reliability of performance. Behind the name MANESTY there now lies the skill and experience of its associated company—John Holroyd & Co., Ltd., who for over 70 years have specialised in the production of machine tools and precision gearing, and who made rotary tablet machines more than 50 years ago.



RS2 Rotary  
Tablet Machine



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***You have only  
until November 30th***

to get your order into the wholesaler's hands, so act today, and get the best out of our Christmas advertising, and the pre-Christmas trade!

***Order it  
quickly -  
or Bang goes  
your bonus!***

**REMEMBER: 64%**

To refresh your memory, here is an outline of the offer:—YOU BUY 12 brushes to retail at 8/11d. each. YOU GET 1 bonus brush, free, with purchase tax already paid, together with display material — and the whole parcel shows you a clear profit on cost of no less than 64%, an appetising offer indeed on an advertised branded line.

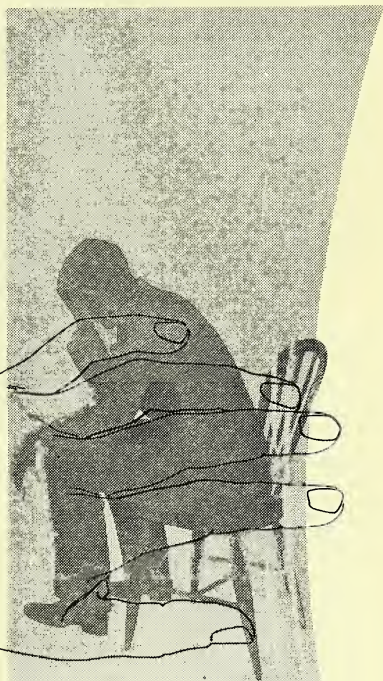
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Doctors ascribe the remarkable results which they obtain with **EDRISAL'** to the fact that this unique preparation provides not only two recognized analgesic agents, but also the well-known anti-depressant 'Benzedrine'. Thus 'Edrisal' relieves pain—and dispels the depression which almost always accompanies pain.



## EDRISAL'—Its dual action relieves pain elevates mood

Each tablet contains: amphetamine ('Benzedrine') sulphate 2.5 mg.; ethylsalicylic acid 160 mg.; phenacetin 160 mg.

'Edrisal' is issued in bottles of 25 tablets.

Trade price 22/6 doz., plus purchase tax 7/6 Retail price 3/1½ each

Dispensing pack 250 tablets 16/3 each (exempt from purchase tax).

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*A Name  
and a  
Standard*

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**IODISED THROAT  
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and all other Botanicals,  
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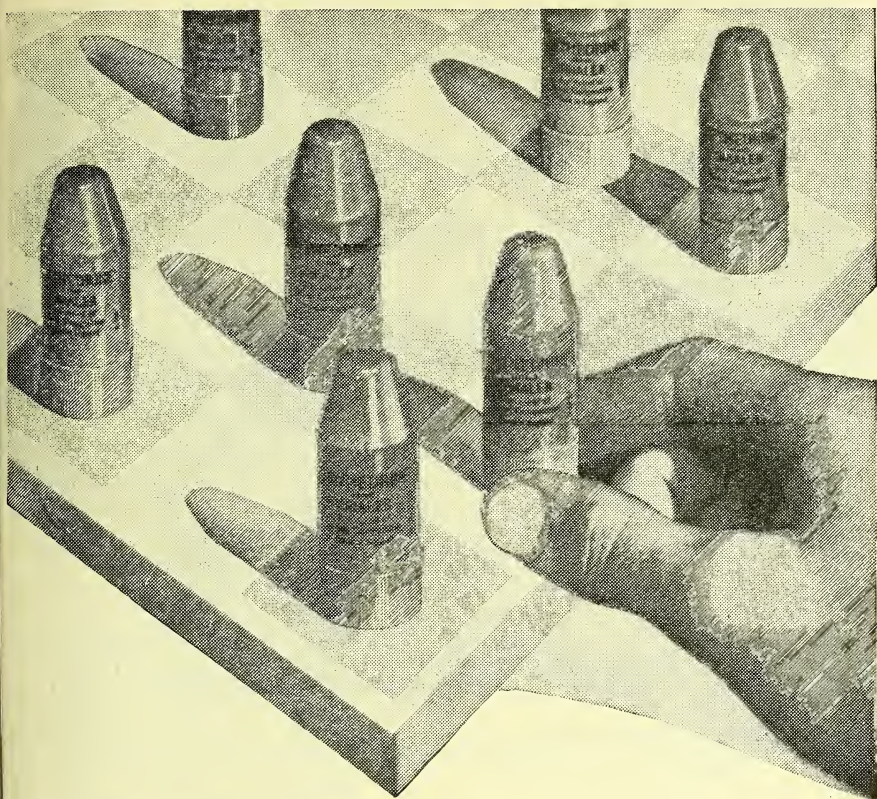
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Review your stocks of the 'Methedrine' Inhaler. Order now to meet the seasonal demand. By so doing you will make a prudent move in winning profitable trade. Available in three gay colours, the 'Methedrine' Inhaler will be sent you smartly cartoned in display-outers holding 24. Also at your service to stimulate sales are a striking display-stand and a showcard.

BONUS TERMS: one 'Methedrine' Inhaler free with every 24 you order.

RETAIL PRICE: 2/- plus 6d. purchase tax.

## ***The 'METHEDRINE' INHALER***

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**‘LINGUETS’**

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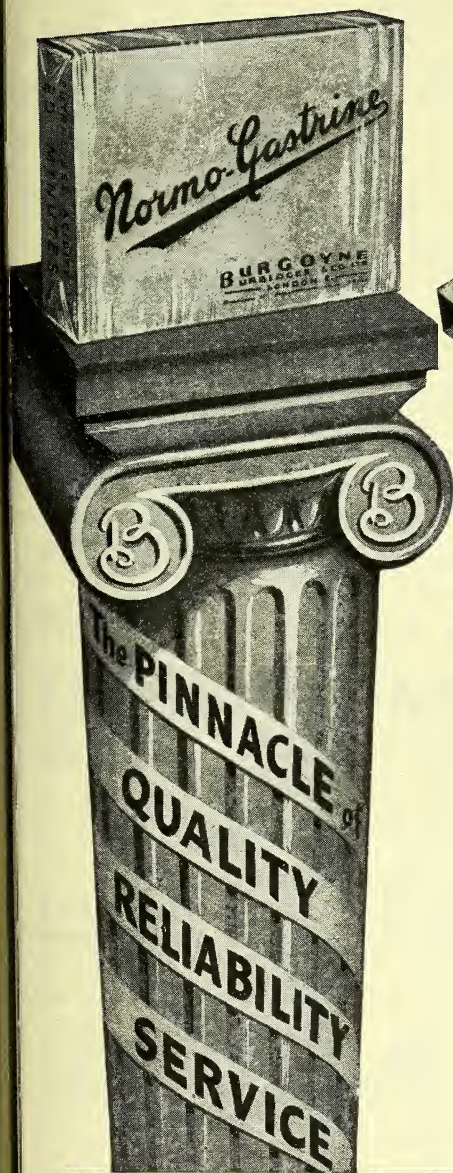
**C I B A**

‘Perandren’, ‘Percorten’, ‘Eticyclin’, ‘Lutocyclin’, and ‘Linguets’ are  
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With RODINE there is no hit or miss—each and every batch is laboratory tested to ensure the strength and biological activity of the toxic chemicals employed.

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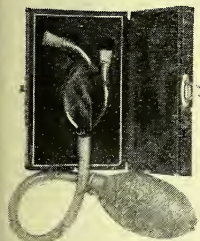
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• <b>ASTHMATOR</b>	14/6	Retail	8/9	Cost
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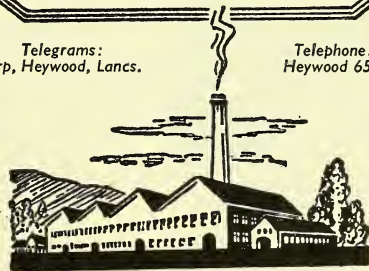
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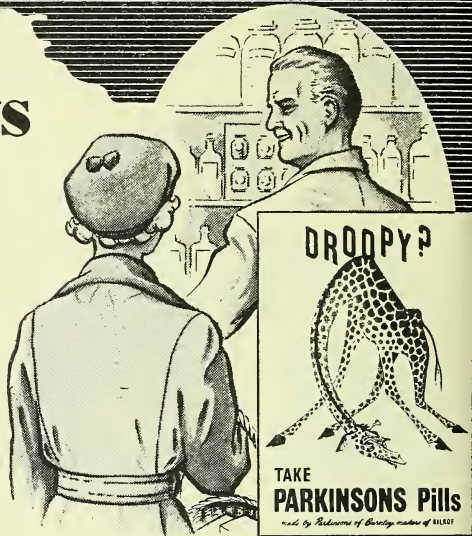
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Do make quite certain that you can supply what the customer asks for. And people are always asking for Parkinsons Pills—just as they ask for Kilkof during the cough season.

The new "Droopy" National advertising campaign will give fresh impetus to their demand. Give them Parkinsons, satisfy them, and profit from repeat sales.



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#### A NUCTA SPECIALITY PRODUCT

This attractive display stand carries the 8oz. Bottle which sells at 4/3½.

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Also Full range of Toilet Specialties . . Violet Oil, Hand Lotion, After Shaving Lotion

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# He must have the best . . .



. . . and *he* knows

that the best is NYLON.

NYLON hairbrushes,

hygienic and easy to clean,

retain their resilience

and lively 'feel' throughout

their long life.

NYLON brushes look well,

sell well and give lasting

satisfaction.

*There is no better brush*

*than a*



**NYLON**

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# There's lots and lots of Rheumatism about!

And plenty of demand for the most reliable general remedy of all—Curicones.

With its present up-to-date formula, it is a remedy you can recommend to all your Rheumatic customers.

This time of year a small counter show of Curicones will bring quite a nice extra trade, while obviously no chemist should ever let himself run out of stock of either the 5/6 or the 26/5 size.

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your name and address for one and see the interest it attracts.



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**A GRAND  
COUNTER ATTRACTION  
-and FREE!**



This attractive Display Outer comes free with every dozen lot of Besorbon medicinal snuff. Give your usual wholesaler a trial order for this all-year-round preventive remedy for Hay Fever, Colds and Catarrh—backed by national advertising. Besorbon sells on sight! Put it on your counter

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ALL WOOL SANITARY TOWELS**

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Retail prices 3/6 & 10/6  
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**SURGICAL BELTS****TRUSSES & SUNDRIES**

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Retail at 4/6, 6/9, 7/6, 9/6,  
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**3 Elegan** HUMAN HAIR NETS

**SUPERB**

**TIGHT EDGE**

**STAR**

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ADVERTISING TO TEN MILLION WOMEN EACH MONTH**

**T**HE "Elegan" Hair Net National Advertising Campaign is promoting an ever-increasing flow of business into the shops of "Elegan" Stockists. So **DON'T DISAPPOINT YOUR CUSTOMERS**; display the "Elegan" Window and Counter Sales Aids and let them see that you too are a stockist of "Elegan" Human Hair Nets.

**Place your order NOW:—**

**ELEGAN HUMAN HAIR NETS**

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**SAMPLES on REQUEST to NEW stockist**

**PRICES FOR ALL SHADES**  
(except Grey or White)

**ELEGAN 'SUPERB'**

**72/- PER GROSS**

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Plus Purchase Tax

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clearly prove

# JEYES'

outstanding

value!



Here, in chart form, you can see at a glance why the 300-sheet JeYES' Flat Toilet Pack shows a saving in terms of *cash value*:

COMPARE THE ACTUAL CONTENTS  
WITH SOME COMPETITIVE PACKS

Equivalent Price  
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<b>JEYES'</b> FLAT PACK	contains <b>300</b> sheets for $1/6$	<b><math>1/6</math></b>
<b>BRAND "A"</b>	contains <b>225</b> sheets for $1/3$	<b><math>1/8</math></b>
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**MORE JEYES' FOR *YOUR* MONEY, TOO!** You can make up to  $32\frac{1}{2}\%$  profit on JeYES' Toilet Paper. That means satisfaction on *both* sides of the counter!

*You sell wisely when you sell*

# JEYES'

**HYGIENIC TOILET PAPER**

(300 sheets—interfolded)

JEYES' SANITARY COMPOUNDS CO. LTD., CHIGWELL, ESSEX



## The camel's hump is chronic *but you can tell depressed customers* *about 'Cogene'*

**M**OST ordinary analgesics relieve *pain*. But far from alleviating the depression that accompanies many ordinary ailments, they often tend to increase it.

Not so 'Cogene.' 'Cogene' relieves swiftly and surely both pain and depression. Two extremely effective analgesic and antipyretic agents, the sedative and hypnotic codeine and the powerful stimulant caffeine combine synergistically to produce the maximum effect from the minimum dosage. Delicate systems therefore tolerate 'Cogene' well. You can confidently tell customers, who tend to be highly strung, about this C.F. product.

### FACTS ABOUT 'COGENE'

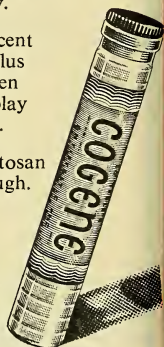
#### Product:

A synergistic combination of Aspirin, Phenacetin, Caffeine and Codeine.

**Pack:** Containers of 10 or 20 Tablets to retail at 1/6 and 2/8 respectively.

**Profit:** 50 per cent on cost price plus 10 per cent when bought on display discount terms.

**Makers:** Genatosan of Loughborough.



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Makers of better products for the community you serve

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*A field of young henbane, Ransom's Farm, Hitchin*

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(Solid and Liquid)

TINCTURES · RESINS  
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MEDICINAL PLANTS FOR OVER A CENTURY

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assistance.

Because you are  
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supplies for your customers,  
there is a continual need  
for containers. And the  
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to make new containers makes  
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So we must look to you to  
keep all containers for re-use.

The C.R.S van calls regularly to pick them up.







## CONTAINER *recovery service*




S.P.D. LIMITED, 3-5, SALISBURY SQUARE, LONDON, E.C.4



# at last - the ALL-PURPOSE DETERGENT !



For the formulation of compounds for washing  
cars  and trains  and even

buildings  for the preparation of glass-  
cleaning detergents for dairies, hotels etc. 

for cleaning, treating or pickling metal in  
alkaline or acid solutions  for wetting

textile fibres  washing fruit and vegetables

 for agricultural sprays  and  
insecticides, for packing as a synthetic detergent

as such  or for compounding with great  
ease into detergent and scouring powders 

the ideal base for every type of detergent is ....

## NANSA S. POWDER

( $C_{12}H_{25}C_6H_4SO_3Na$ )

Containing 40% Dodecyl Benzene Sodium Sulphonate and 56% Sodium Sulphate, a trace of  $P_2O_5$  and about 4%  $H_2O$ —now available in highly soluble TOTALLY SPRAY-DRIED powder form—the advantages of which are immediately appreciated; economical and easy to handle; non-dusty; free-flowing, non-hygroscopic; ideal for mixing with other builders and diluents in the formulation of detergents etc. NANSA is the trade name covering a wide range of alkyl aryl sulphonates of our manufacture.

NANSA H.S. PASTE    NANSA D. POWDER    NANSA A. LIQUID    NANSA U.C. POWDER

Detailed literature and samples on request to the nearest MARCHON SALES OFFICE or any of our FOREIGN REPRESENTATIVES.

HEAD OFFICE:

**MARCHON PRODUCTS LIMITED**

### WHITEHAVEN

Phone: Whitehaven 650/1/2 & 797/8/9

### SOUTHERN SALES OFFICE:

36 Southampton St., Strand, London, W.C.2.

Phone: TEMple Bar 5358.

Grams: Marchonpro, Rand, London.

### CUMBERLAND

Grams: Marchonpro, Whitehaven

### LANCASHIRE SALES OFFICE:

1 Booth Street, Manchester, 2.

Phone: BLAckfriars 7778.

Grams: Marchonpro, Manchester.

### NORTHERN IRELAND SALES OFFICE:

7 Bedford Street, Belfast. Phone: Belfast 26798.

**Marchon**

# DOUBLE PROFIT— ON EVERY JAR OF CHILDREN'S



**Every sale brings you  
more than twice the profit  
of average priced vapour rubs**

Every time you sell a jar of Children's Musterole you *make more than twice the profit* you get from selling an average-priced vapour rub.

Work it out and prove it for yourself. Children's Musterole brings you a profit of 11/8d. a dozen. Now check that against an average-priced vapour rub and you'll see at once — *more than twice the profit when you sell Children's Musterole.*

Children's Musterole is extra mild — the ideal *all-purpose* rub for chest colds, sore throats and other purposes. Musterole advertisements are kept before nearly 16,000,000 people every month.

**Keep it on display all the time.**

**Distributors: Thos. Christy and Co., Ltd., North Lane, Aldershot, Hants.**

## Firm Favourites *with all the family*

Every woman wants bathtime luxury and day long freshness — sell her delicately perfumed mildly medicated Cuticura Soap and Talcum Powder. Many of your customers have a "problem skin" — Cuticura Ointment is the perfect answer.

Men customers are won by the smooth comfort of Cuticura mildly medicated Shaving Stick, in smart plastic container, and will return again and again for refills.

Baby loves the soothing comfort of mildly medicated Cuticura Soap, Talcum, Ointment. Recommend Cuticura for chafing and nappie rash, and convince all careful mothers that nothing else will do for baby's tender precious skin.

# Cuticura

MEDICATED & TOILET

SOAP · OINTMENT · TALCUM · SHAVING STICK

**USE CHEMISTS STOCK AND DISPLAY**

**THIS WIDELY ADVERTISED FAMILY RANGE—NOW IN ATTRACTIVE DISPLAY OUTERS**

**British Distributors: NEWBERRY & PHILLIPS LTD., 203 Victoria House, Southampton Row, London, W.C.1. Phone: HOL 1564**

**Manufacturers: POTTER DRUG & CHEMICAL CORPORATION, 205-207 Victoria House, Southampton Row, London, W.C.1.**

# ACIMETION

DL-METHIONINE

*The only essential sulphur-containing amino acid*

Indicated in toxic hepatitis, hepatic cirrhosis, secondary anaemias, purpura, jaundice and debility.

Issued in bottles of 50 and 250 tablets each containing 0.25 G. DL-Methionine.

P.A.T.A PRICES

50 tablets 10/6d.

84/- per dozen

250 tablets 47/3d.

378/- per dozen

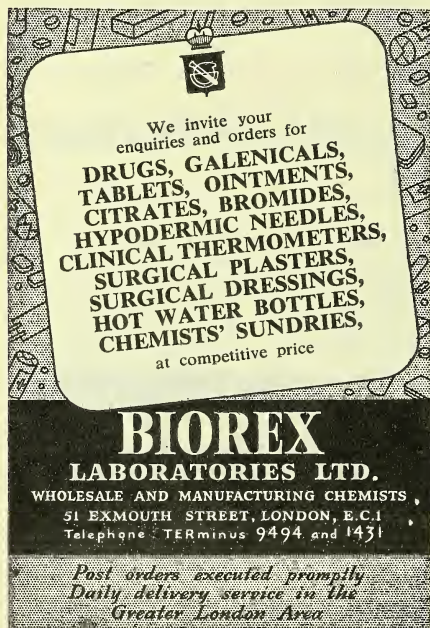
(Both sizes exempt Purchase Tax)

## CONTINENTAL LABORATORIES LTD.

101, Great Russell Street, London, W.C.1.

Telephone: MUSEum 2042-3

Telegrams: Taxolabs, Phone, London.



We invite your enquiries and orders for

**DRUGS, GALENICALS,  
TABLETS, OINTMENTS,  
CITRATES, BROMIDES,  
HYPODERMIC NEEDLES,  
CLINICAL THERMOMETERS,  
SURGICAL PLASTERS,  
SURGICAL DRESSINGS,  
HOT WATER BOTTLES,  
CHEMISTS' SUNDRIES,**

at competitive price

**BIOREX  
LABORATORIES LTD.**

WHOLESALE AND MANUFACTURING CHEMISTS,  
51 EXMOUTH STREET, LONDON, E.C.1  
Telephone: TERminus 9494 and 1431

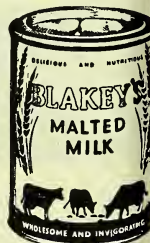
*Post orders executed promptly  
Daily delivery service in the  
Greater London Area*

## TWO WAYS TO HEALTH —

### Blakey's Malted Milk

A delightful and nutritious drink whether made with water or with milk. Aids digestion and encourages deep refreshing sleep.

1 lb. tin 3/11



### Blakey's Malted Oatmeal

Known for 60 years as the ideal cereal food for babies and invalids and enjoyed by the whole family.

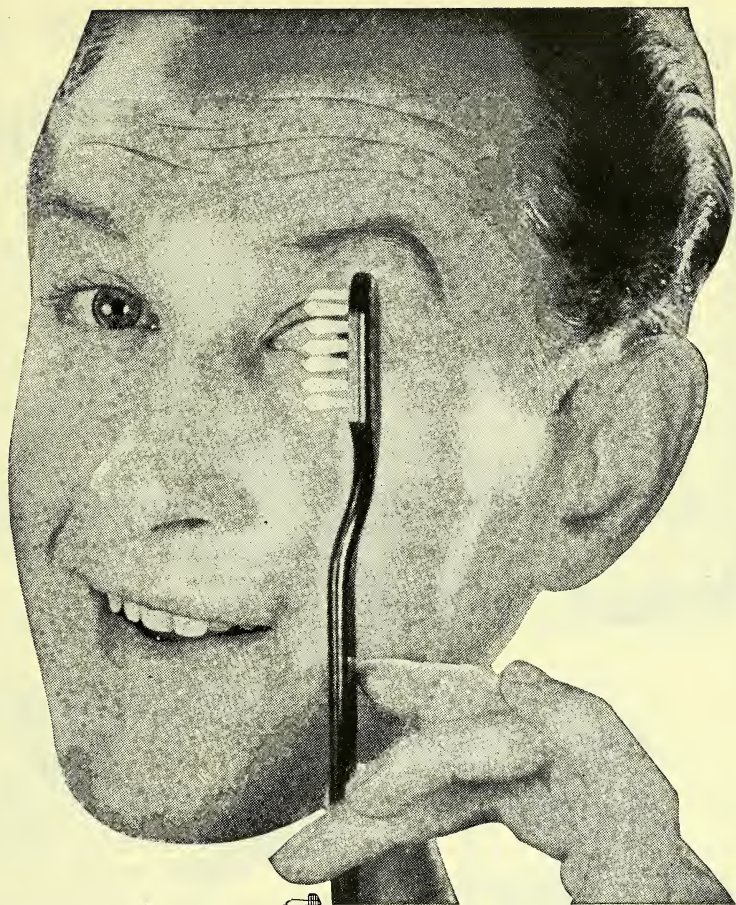
1 lb. carton 1/2

1 lb. tin - 2/6

★ COMMENCING 1952 ★

Eight leading women's magazines will carry advertising to help you sell  
B.M.O and B.M.M.

**BLAKEY'S FOOD CO. LTD., LINCOLN**



Be wise  
— sell  
*Wisdom* REGD.



BECAUSE . . . Addis' new campaign for Wisdom toothbrushes is going to hit the public right in the eye — make them more Wisdom conscious than ever. Because Wisdom is the most profitable toothbrush for you — it sells better and quicker. Because your customers can take their pick of Nylon (Round-ended) or Natural Bristle . . . be wise and sell Wisdom.

THE QUICKEST SELLING TOOTHBRUSH

MADE BY ADDIS LTD., OF HERTFORD

**GOOD SERVICE***in the North East!*NORTHUMBERLAND, DURHAM & N. YORKS  
VAN DELIVERIES

Drugs, Galenicals, Tablets, Pills and Capsules. Ethical Proprieties, Patents, Surgical Dressings and Sundries. Fine and Analytical Chemicals. Scientific Apparatus and Glassware.

We shall be pleased to send our new proprietary list on application.

**Middleton & Co. Ltd.**

MANUFACTURING CHEMISTS  
BOUNDARY ROAD, MIDDLESBROUGH  
TELEPHONE MIDDLESBROUGH 3207-B-9

**YOUR WINDOW DISPLAY**

OF  
**Nutrigen**

**brings Bigger Bonus,  
plus Better Business**

Extra 7½% discount on all orders of a gross or more, provided window display is given. This offer is open now to all stockists who wish to profit by 'tying up' with the NUTRIGEN National advertising. Attractive sales-creating display material gladly sent upon request.

NUTRIGEN is supplied in packets of 12 tablets for 1/- or jars of 50, 100, 250 or 500.



Keeps Cut Flowers Garden Fresh

All enquiries to:

**SIMMONDS-LOW HORTICULTURAL PRODUCTS LTD.**

78/80 Church Road, Acton, W.3

**UP GO THE SALES!**

—as National advertising persuades more and more women that BU-TO, the rose-scented depilatory, is the only one for them! Tell YOUR customers about Bu-to's pleasant perfume. That's what makes them buy—and buy again!

Retail price 2/6 per tube inc. tax. Trade: 12/- per dozen plus tax. Packed in attractive 1 dozen display outers.

**BIOMETICA LIMITED**  
BULLHEAD ROAD, BOREHAM WOOD, HERTS.

**C.V.B.**

**CARR'S VITAMIN B<sub>1</sub>**  
PREPARED WHEAT EMBRYO

**A RICH NATURAL SOURCE OF  
VITAMINS B and E**

**TWO SIZES**

**1/9 or 3/-**

**Trade 16/- doz. or 27/- doz.  
FREE NON-RETURNABLE CARTONS**

From Principal Wholesalers  
or from the Manufacturers

**CARR'S CEREAL PRODUCTS LTD.**  
**CARLISLE**

# The strut behind every 'ASPRO' display

WHEN displays are backed with continuous national advertising—that's when they sell! Here's the support your 'ASPRO' display is getting this winter:

'ASPRO' films and filmlets showing in nearly 75% of Britain's cinemas.

'ASPRO' advertisements appearing continuously in National and Provincial Press.

'ASPRO' posters appearing on hoardings, news-boards and transport vehicles.

THE PUBLIC will be getting the 'ASPRO' message everywhere.



**THE BEST  
SELLER  
ON THE  
COUNTER**

**NATIONAL  
ADVERTISING**

# 'ASPRO' DISPLAYS ARE SELLING DISPLAYS

Made in England by  
ASPRO LIMITED, Slough, Bucks

A.T.A.

**ASPRO**  
The Trade Mark

A preparation  
you can safely  
recommend

Royal Court Tintona is the most popular and reliable Hair Dye on the market today, and the new "Hair" showcard is certain to attract attention and increase sales. Display Terms — Thirteen to the dozen on orders for three dozen assorted shades. Seven natural shades available.



# ROYAL COURT TINTONA

The Oatine Company (Opera Omnia Ltd. Proprietors), 44 Kennington Lane, London, S.E.

CVS

## M&W

for  
*Better Value*

**PILLS  
TABLETS  
CAPSULES  
LOZENGES  
SUPPOSITORIES**

Quotations on request

**MATTHEWS & WILSON LTD.**

6-8 COLE ST., LONDON, S.E.1.  
TELEGRAMS: PILLBOLU, SEDIST, LONDON • PHONE: NOP. 2147-8



## Eade's PILLS

Eade's Rheumatic and Gout Pills, the remedy with a 100 year old fame.

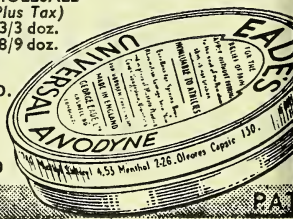
RETAIL (Inc. Pur. Tax)	WHOLESALE (Plus Tax)
1/10	13/3 doz.
4/-	28/9 doz.
6/9	48/6 doz.

## Eade's UNIVERSAL ANODYNE

Another Eade's product always in demand.

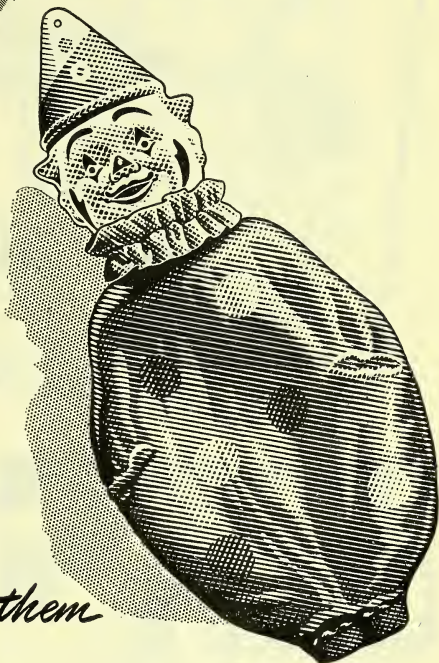
RETAIL (Inc. Pur. Tax)	WHOLESALE (Plus Tax)
1/10	13/3 doz.
4/-	28/9 doz.

EADE'S PILLS LTD.  
(Dept. C. & D),  
232 Goswell Rd.,  
LONDON, E.C.1.  
Clerkenwell 3370



*Put them in your window now  
they won't stay there for long*

They're Dunlop Kiddies Hot Water bottles—and from Mid-November Christmas an extensive NATIONAL ADVERTISING CAMPAIGN will boost your Christmas sales. Kiddies love these hot-water bottles—and parents find them attractive, too. Yes. Dunlop Kiddies Hot Water bottles will be a "Hot" line in more senses than one this Christmas.



*Show them — and sell them*

# DUNLOP

## *Children's*

### HOT WATER BOTTLES

RED RIDING HOOD · CLOWN · DOGGY · KITTY · TEDDY AND BUNNY STYLES

*Obtainable from your usual wholesaler*

*Keep them skipping fit Mother!*



**EDME**  
with **"Autumn Sun"**  
EXTRACT OF MALT  
WITH COD LIVER OIL  
*The finest protection for chills and ills*

# Have you seen

## THIS

new beautifully designed  
showcard size 23" x 17½"  
full colours?

With the two side panels 17" x 10" each also supplied, the whole makes an attractive window display that compels attention, and creates sales.

THE COMPLETE SET IS FREE. Ask your representative, or write to us for your FREE set.

EDME "AUTUMN SUN" is a Malt and Oil with the "tasty flavour."

For prices and further particulars write to:

**EDME LIMITED**  
84-86 REGENT ST., LONDON, W.  
Phone: Regent 5563-4

# GOING GREY?



*Keep it*  
**DARK** with  
**SHADEINE**

Perfectly Harmless

— Your SALES are assured if you stock SHADEINE!

Still the best hair tint. In all natural shades. Stocked by all wholesalers. Trade prices—1 oz. 16/9 per doz., 2 oz. 29/7 per doz. Purchase Tax 100% Retail Prices 3/3 and 5/9 per bottle respectively. Also the new GOLDEN SHADEINE for lightening mousey hair. 2 oz. 16/9 per doz., 4 oz. 29/7 per doz., Purchase Tax 100%. Retail Prices 3/3 and 5/9 per bottle respectively.



**THE SHADEINE CO.**  
49 Churchfield Rd. Acton, London, W.3

## MORE PUBLICITY FOR RADIAN PRODUCTS RADIAN MASSAGE CHART

A chart has been distributed to 2,800 of the larger soccer and rugby clubs, demonstrating the methods of applying Radian and Radian Massage Cream to the various muscle groups liable to soccer and rugby injury. Chemists are invited to display the chart in order to link up with and take advantage of the publicity.

Please write for your copy now as only a limited quantity is available.

Professional samples and literature on request from

**Radiol** Telephone: VANDYKE 2692  
**CHEMICALS LIMITED**

78 UPPER RICHMOND ROAD, LONDON, S.W.

# The Eire Market

for

## Pharmaceutical & Toilet Preparations and Kindred Products

Fassett & Johnson (Ireland) Ltd. have completed arrangements to expand their Marketing Organization in Eire, and now invite enquiries—in confidence—from manufacturers who wish to develop the Eire market.

This invitation is particularly extended to the manufacturers of Pharmaceutical and Toilet Preparations of high quality which can properly take their place alongside the internationally known products that Fassett & Johnson Ltd. have been privileged to serve for more than 60 years.

*Please address enquiries, in the first instance, to :-*

# FASSETT & JOHNSON (Ireland) LTD.

6 & 7 CROW STREET - DUBLIN

Phone : 71112

Grams : 'Plasters, Dublin'



## THE FINEST FRUIT SQUASH

The incomparable blend of Luscious  
Sun-ripe Orange Juice and the tang of  
Refreshing Lemon Juice

**OR-LEM LTD., SOUTHAMPTON**

## QUATERNARY AMMONIUM COMPOUNDS

Now available commercially  
**LEDA CHEMICALS LTD.**, are pleased to  
announce that they are now manufacturing the  
following quaternary ammonium compounds in  
commercial quantities:—

Lauryl Pyridinium Chloride • Lauryl Pyridinium  
Chloride (broad cut) • Cetyl Pyridinium Chloride  
Lauryl Dimethyl Benzyl Ammonium Chloride  
Mixed Alkyl Dimethyl Benzyl Ammonium Chloride  
Cetyl Dimethyl Benzyl Ammonium Chloride  
Stearyl Dimethyl Benzyl Ammonium Chloride  
ALSO AVAILABLE: HIGHER ALKYL CHLORIDES, broad  
and narrow cuts from C<sub>8</sub>-C<sub>18</sub>. Data sheets and full  
information gladly supplied on request.

**LEDA CHEMICALS LTD.**, Wharf Rd., Ponders End, Middx  
Tel. No.: HOWard 2231 Tele. Address: Ledakem, London

## RECOMMEND

# S.D.2

with confidence

**PENETRATES and REBUILDS DAM-  
AGED TISSUE in SKIN ILLNESSES**  
Remarkable for the Treatment of Burns,  
Spots, Rashes, etc.

**BIO-COLLOIDS LTD.**, Altrincham, Cheshire  
BC35

# Senna

**FROM OUR  
OWN GROWERS**

*Alexandrian & Tinnevely  
Pods, Leaves, Siftings*

**John Ronaldson & Co. Ltd.**  
110 Cannon St., London, E.C.4 Phone: MANsion Hse 1321

Telephones  
MAN. HOUSE 6877  
5 Lines

**A. REVAI & CO. LTD**

7-8 IDOL LANE  
LONDON, E.C.3.

**EUCALYPTUS OIL B.P.**

**SASSAFRAS OIL**

**CADE OIL B.P.**

## ATTENTION!

*We can supply*  
**DRIED YEAST B.P.C.**

**THE DISTILLERS CO. LTD.,**  
12 Torphichen Street,  
Edinburgh, 3

**ALFRED COX (SURGICAL) LTD.**  
EDWARD ROAD, COULSDON, SURREY

## ACTUAL MAKERS

**SURGICAL & VETERINARY  
INSTRUMENTS, SUNDRIES, ETC.**  
ALL METAL & RECORD SYRINGES,  
NEEDLES, INJECTORS

## DICTIONARY OF SYNONYMS

For the pharmacist and his staff. Awkward  
queries answered for 5/9 Post Free

**THE CHEMIST & DRUGGIST,**  
28 Essex Street, London, W.C.2

## WE WANT

Sole Manufacturers: **JEFFREYS,  
MILLER & CO. LTD.**, Leyland Mills,  
Wigan. (London Dept.) 9 Brookside Rd. N.19

# MILLAMALT

BECAUSE OF THE BUTTERSCOTCH FLAVOUR





**PHARMACEUTICAL CHEMICALS**  
**ALKALOIDS • DRUGS • OILS**



Manufacturers of

**BENZOCAIN**  
**BENZONAPHTHOL**  
**p-AMINO BENZOIC ACID**  
**p-NITRO BENZOIC ACID**  
**THEOPHYLLINE and SALTS**

**HUFFER & SMITH LTD**  
WHOLESALE & MANUFACTURING CHEMISTS  
**CROYDON, ENGLAND**

Telephone: THORNTON HEATH 4266-7

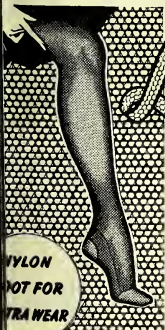
Telegrams:

HAHU, CROYDON SANTONINIC CROYDON

## NE ELASTIC NET TO MEASURE

and you don't even have to  
stock them—to sell them!

tonet surgical stockings are sold for you through  
TIONAL & MEDICAL JOURNAL ADVERTISING. All you  
d is a supply of measurement forms which we will  
ly send to you together with display material and  
iculars of trade discount. Write today!



*Lastonet*

**E-L-A-S-T-I-C**  
**NET STOCKINGS**

- ★ **MADE ONLY  
TO MEASURE**
- ★ **INVISIBLE under  
ordinary stockings**
- ★ **COOL TO WEAR**

TONET PRODUCTS LTD. Carn Breu, Redruth, Cornwall

*Telling millions*

*After the party—*  
The only odor of odors found is quickly  
dispelled by Zoflora perfume  
pleasantly perfumed.  
Zoflora remains O.D.T., so  
odors remain and odors  
disappear.

*Where infection lurks*  
Zoflora is almost a necessity.  
Sprayed on the walls, floor, and  
ceiling properties  
even as its  
in air.

*Sweeten the air—*  
A pleasant atmosphere imparts the word  
pleasant. Zoflora Sweeten the air.

*but GERMS never sleep!*  
Fragrant mist-sprayed  
Zoflora destroys air-borne  
germs in the nursery. In-  
duces untroubled sleep.

*Fragrance & Safety in the Sick-room.*  
Zoflora cleans and sweetens the air  
and induces peaceful sleep. A boon  
to patients and nurses alike.

**Zoflora**  
*Perfumed DISINFECTANT*  
is a powerful antiseptic which dispels  
unpleasant odours and imparts its own  
delicious perfume.

**Zoflora**  
*Perfumed DISINFECTANT*  
is a powerful antiseptic properties  
dispel unpleasant odours and leave  
a safer, cleaner atmosphere.

From your chemist  
or direct from the makers:  
THORNTON & ROSS, LTD.  
HUDDERSFIELD

From your chemist,  
or direct from the makers:  
THORNTON & ROSS LTD.  
HUDDERSFIELD

## about **Zoflora** *Perfumed* **DISINFECTANT**

Zoflora, the spray-disinfectant, is now  
advertised in popular "home" magazines  
with an estimated readership of 16,300,000.  
This is making custom for you, because each  
advertisement directs housewives to their  
chemist.

May we send you a trial order and show  
material?

RETAIL: 2/6 per bottle  
Complete Spraying Outfits, 12/6 and 30/  
TZ 22 Usual Trade Discounts

**THORNTON & ROSS**  
LIMITED  
LINTWAITE LABORATORIES HUDDERSFIELD

*"Bemax is used regularly  
in 500,000 homes..."*

*and the number increases daily"*

\* These facts are revealed by a recent survey carried out in Great Britain. A most interesting survey, which also shows that the value of Bemax is amply confirmed by the recommendations of my professional colleagues—doctors, nurses, welfare workers, everywhere.

\* And remember, one of the brightest advertising campaigns of recent years—in which I am privileged to appear regularly—is still being waged persistently in 'Radio Times' and other periodicals on behalf of this invaluable dietary supplement.

"Do hope your customers are able to see that you always have Bemax in stock."



## BEMAX Stabilized Wheat Germ

the richest natural vitamin-protein-mineral supplement



VITAMINS LIMITED, UPPER MALL, LONDON, W.8

### PRICES

	Doz.	Quantity
		Terms
1/9 carton at	16/6	16/- doz.
3/- "	28/6	27/3 "
5/6 "	52/6	50/- "

Quantity terms available on minimum orders of 3 doz. x 3/0 or the equivalent in the 1/9 & 5/6 sizes (1 x 3/0 = 2 x 1/9 = 1 x 5/6)

## Ladies' Overalls

**COAT STYLE.** Made in strong and hard-wearing Drill, with long sleeves, button front and belted. Available in Green, Beige, Grey, Pink, Sky, and Rust Red.

S.W.	W. & W.X.	O.S.
27/-	29/2	32/3

**WRAP-OVER STYLE.** Obtainable in strong White Drill.

S.W.	W. & W.X.	O.S.
22/11	25/2	28/8

All the above are Utility and fully shrunk. (Prices subject to fluctuation)

Postage and Packing 1/- extra. Please state size and second colour choice when ordering.

## GARDINER'S

1, 3 & 5 COMMERCIAL RD., LONDON, E.1

(Opposite Aldgate East Station)

Telephone: B1Shopgate 6751/3

Gardiner & Co. (The Scotch House) Ltd.

## Diuromil

BRAND

*A medically-prescribed product for the treatment of*

**RHEUMATISM — GOUT — ARTHRITIS  
FIBROSITIS — CYSTITIS — PYELITIS**

Diuromil is an ethical product regularly prescribed by doctors all over the country. It is an effervescent granular preparation of palatable taste, the formula including Piperazine and Lithium, which, acting together, are twice as effective as solvents of Uric Acid as Piperazine alone. Diuromil mobilises, eliminates and prevents precipitation of Uric Acid. Regularly advertised in the medical and nursing press, but may be recommended and sold without medical prescription.

*Write for sales terms, samples and literature.*

**PHARMAX LIMITED**

*The Organ Works,  
Old Hill,  
Chislehurst, Kent.*





display  
this  
**OUTER**  
for  
good  
repeat  
business

POCKET SIZE TINS, MEDIUM & LARGE

*Flexoplast*  
BRAND  
Regd

**FIRST-AID DRESSINGS**

OBTAINABLE FROM YOUR  
USUAL WHOLESALE SUPPLIER

Manufactured by  
**EDWARD TAYLOR LTD., MONTON, LANCs.**  
Established over 100 years



Flexoplast Dressing is  
also available in the  
new hygienic cartons.  
Size  $1\frac{1}{2}$ " x 1 yard and  
 $2\frac{1}{2}$ " x 1 yard.

# PHARMACEUTICAL EMULSIONS & EMULSIFIERS

by L. M. Spalton, B. Pharm., M.P.S.

Today, the pharmacist is faced with an almost bewildering assortment of emulsifying agents, all having varying properties and requiring different methods of treatment.

In this book the considerable range of these products has been classified together with essential practical points about their pharmaceutical use. It contains chapters devoted to the theory of the formation of emulsions, properties of different emulsifying agents (classified into groups according to their structure and characteristics), the formulation and preparation of emulsions, the general methods of preparing emulsions with details of technique and causes of emulsion separation, preservation and storage of emulsions etc.

The practical uses of emulsifiers is dealt with at considerable length, together with methods of handling each type of emulsifying agent and full notes of incompatibilities and other matters.

The book also contains a classified index of over 300 emulsion agents used in the Drug, Toilet and Cosmetic trades and other industries, with references to their composition, type and uses together with an index of manufacturers.

Useful and up-to-date—this book provides essential information in concise form.

EVERY PHARMACIST SHOULD POSSESS A COPY

**5/6** post free

*Send remittance with order to :—*

**The Publisher, THE CHEMIST & DRUGGIST**  
**28 Essex Street, Strand, London, W.C.2**



## **ROTER GASTRIC ULCER TABLETS**

### *Indicated for*

GASTRIC and DUODENAL ULCERS,  
CHRONIC DYSPEPSIA and  
GASTRITIS.

### Retail Prices :

"40" tins 7/11, "120" tins 22/6, "640"  
tins £5. 12. 6 and Dispensing Packs (720)

## **ROTERCHOLON**

### *Indicated for*

HEPATO-BILIARY DISORDERS

### Retail Prices :

"60" tins 8/6, "150" tins 19/6 and  
Dispensing Packs (500)

★ *Obtainable from the Importers :*

**F.A.I.R. LABORATORIES LIMITED**

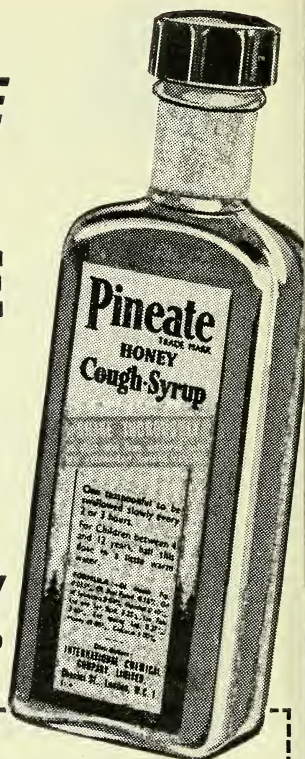
179 HEATH ROAD · TWICKENHAM · MIDDLESEX

*Telephone : Popesgrove 2028*

# THEY'LL SOON BE ASKING FOR PINEATE

When winter brings coughs, people will ask for 'Pineate' again. Children love 'Pineate', the Honey Cough-Syrup—they'll be asking mother for it. And mother will ask at your counter. Stock up now and be ready.

**FOR EXTRA SALES SHOW  
PINEATE ON YOUR COUNTER**



## TRADE TERMS

Selling Price (Inc. P.T.) 2/3 each. Trade Price (Exc. P.T.) 16/3 per doz. Purchase Tax 5/5 per doz.

## DISPLAY BONUS

In return for a guaranteed fourteen-day display, special discounts are available as follows:—

*On an I.C.C. parcel of more than £5 but less than £10 in value..10%*  
*On an I.C.C. parcel of the value of £10 and over .....12½%*

**MAKE UP A PARCEL FROM THESE I.C.C. PRODUCTS:**

'PINEATE' • 'ANADIN' • 'ANNE FRENCH' • 'BiSoDoL'  
 'BISURATED' MAGNESIA • 'FREEZONE' • 'KOLYNOS' • 'REUDEL' BATH SALTS

# Pineate <sup>Honey</sup> Cough-Syrup

TRADE MARK

**International Chemical Co. Ltd., Chenies Street, London, W.C.2.**

*What does*  
**IMPERIAL LEATHER**  
*mean to you?*



A FASCINATING perfume? A standard of quality noticeably better than the rest? A full range of toilet luxuries that find instant acceptance from your customers? The usual answer is all of these things. For the national advertising which has created so great a demand has done so mainly because it has directed attention to products of exceptional merit.

**Cussons**

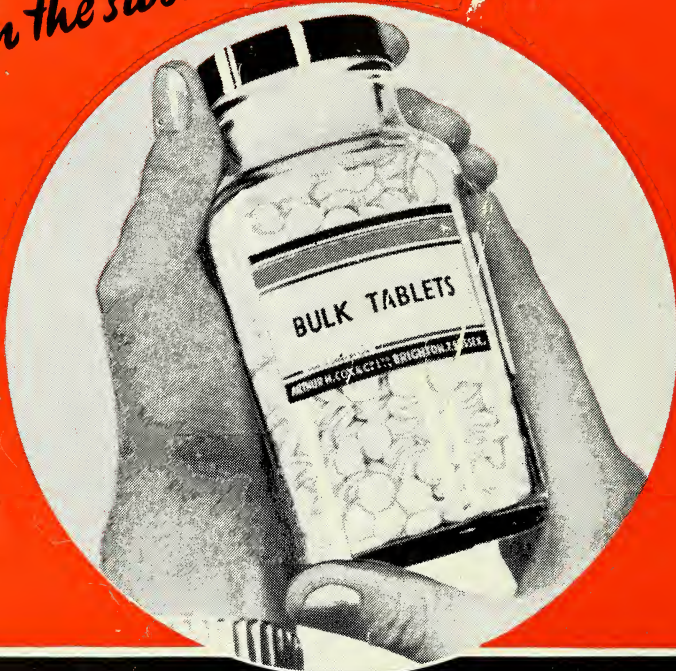
CUSSONS SONS & CO. LTD

84 BROOK ST, GROSVENOR SQ, LONDON W.1

The  
**CHEMIST AND DRUGGIST**

NOVEMBER 3, 1951

*In the sure hands of* **EXPERIENCE!**



**COX**

... Since 1839 Manufacturing Chemists to  
the Pharmaceutical Industry!

**SPECIALISTS IN SCIENTIFIC  
PILL AND TABLET MAKING**

**ARTHUR H. COX & CO. LTD., BRIGHTON 7, SUSSEX**